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R-320

Automatic Round Product Labeling System

Operator's Manual

Serial #

Operator's Manual
Version: C 12/8/2004

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SECTION 1 OVERVIEW

INTRODUCTION

Thank you for purchasing the R-320 Automatic round product labeling system. The R-320 is known for high quality and operating convenience. The R-320 features heavy-duty steel framework with casters and leveling pads, L-15 label applicator, variable speed components, photoelectric product sensor and easy access control enclosure. The applicator is at the heart of every labeling operation. The L-15 is a mid-range wipe-on label applicator with speeds up to 1200 inches per minute. The clutch/brake operated machine is a low maintenance unit, featuring analog controls and digital label sensing, built into a durable labeling workhorse.

The variable speed applicator has advanced features for label dispensing and label placement. First, the L-15 has an “on delay,” controlling the timing of the label dispense with regards to the signal from a product sensor. The applicator also features an “off delay,” controlling the labels stop position with relation to the peeler plate.

The R-320 has no pneumatics requiring electricity only (120VAC 60Hz ±10%), and can handle label web widths up to 6 ½ inches. The R-320 can also handle label rolls up to 12 inches in diameter on a 3”core.

With proper maintenance the R-320 will provide many years of dependable and trouble free service. We wish you much success with this product and will always welcome any suggestions you may have, as to how we may improve our products. Read this manual and familiarize yourself with the machine before using this equipment.

SPECIFICATIONS

Electrical Power:	120VAC, 10 Amps, 60Hz
Label Apply speed:	Depends on label size up to 1200 Inches/min
Label Size:	6-1/2” web capacity on 3” Core -12” Diameter roll
Nominal Size:	42” Wide x 72” Long x 56” Tall (1066.8mm Wide x 1828.8mm Long x 1422.4mm Tall)
Shipping Weight:	approx. 1075 Lbs (487.6Kg)

PRODUCT WARRANTY

Universal Labeling Systems, Inc. warranties all parts to be free from defects in material and workmanship for a period of one year from the date of shipment from our facility.

This guarantee is based upon equipment being used 8 hours per day, or 40 hours per week, or in any increment which does not total more than a single shift operation, or 2,080 hours per year. Warranty will be reduced proportionally.

This warranty does not cover parts failure caused by lack of normal maintenance, abuse or misuse of the equipment.

PERFORMANCE GUARANTEE

All equipment manufactured by Universal Labeling Systems, Inc. carries a 30-day performance guarantee. If your machinery does not perform as described in our quote to you within 30 days of shipping, Universal Labeling Systems, Inc. will make every attempt to correct it. If after a reasonable period of time, the machinery does not meet the specified performance, we will take your machine back and reimburse you in full.

START UP SETTING

CONVEYOR SPEED _____

TURNING UNIT/ENCAPSULATOR SPEED _____

APPLIER SPEED _____

PRODUCT SPACER SPEED _____

ON DELAY _____

OFF DELAY _____

SECTION 2 CONTROLS AND THEIR FUNCTIONS

R-320 CONTROL ENCLOSURE

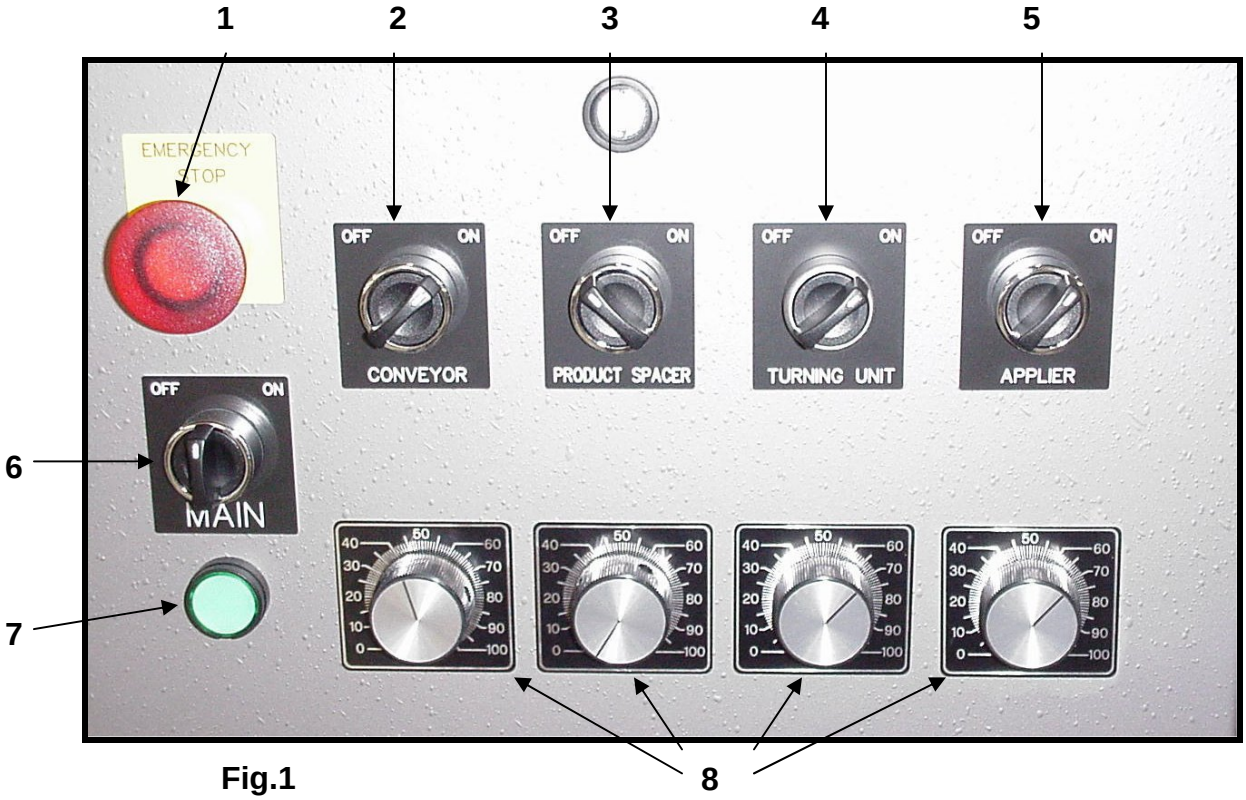


Fig.1

1. **Emergency Stop:** When pressed in it shuts down the system and a Red light turns ON. To reset system, pull button back out, the Red light turns OFF, turn Main switch ON, green pilot light comes on.
2. **Conveyor Switch:** When on, it supplies power to the Conveyor.
3. **Product Spacer Switch:** When on, it supplies power to the Product Spacer.
4. **Turning Unit Switch:** When on, it supplies power to the Turning Unit.
5. **Applicator Switch:** When on, it supplies power to the Applicator.
6. **Main Switch:** When turned to Right, it turns system on. When turned to the left, it turns system off.
7. **Pilot Light:** When Emergency Stop is pulled out and power is ON to system, the light is ON.
8. **Speed Controls:** Controls the speed of the device directly above it. Turning to the right increases speed. Turning to the left decreases the speed.

L-15 FRONT PANEL

1. **Main Switch**: Supplies power to the machine. The main switch "On" also supplies power to the hot stamp coder outlet. Therefore, the coder can be pre-heated without running the motor.
2. **Fuse:** 3 amps. 5 amp with coder
3. **Off Delay:** Turn knob clockwise to provide up to one-second delay of label detection. Works with photoelectric label sensing.
4. **On Delay:** Turn the knob clockwise to provide up to a one second delay before label application.
5. **Label sensor Outlet:** 4 Pin Female amphenol. 4 Pin male amphenol is attached to label sensor.
6. **Hot Stamp Coder Outlet:** 5 Pin Female amphenol. 5 Pin male amphenol is attached to the hot stamp imprinter head.
7. **Product Detection Outlet:** 6 Pin Female amphenol. 6 Pin male amphenol is attached to the photoelectric product sensor.
8. **Motor Switch:** Supplies power to the motor. Turn this switch OFF when setting product sensor to prevent labels from dispensing.
9. **Jog Switch:** Dispenses one label when depressed.

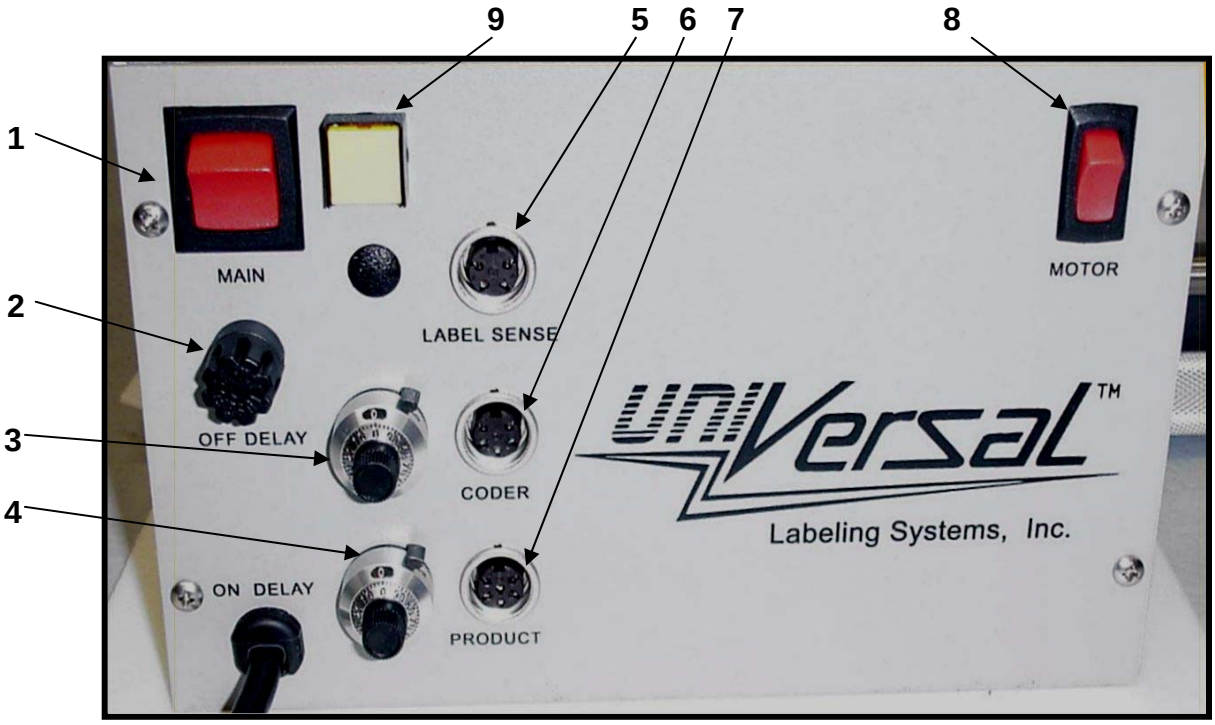


Fig.2

SECTION 3 SETUP AND OPERATION

ADJUSTING PEELER PLATE TO CONTAINER

The peeler plate of the applicator needs to be adjusted square to the conveyor in both the flow direction as well as across the conveyor. To adjust in the flow direction, there is a knob under the applicator. Turning the knob clockwise will cause the applicator to tip forward. Turning the knob counter clockwise will cause the applicator to tip backwards. **(See Fig.3 & 3a)**

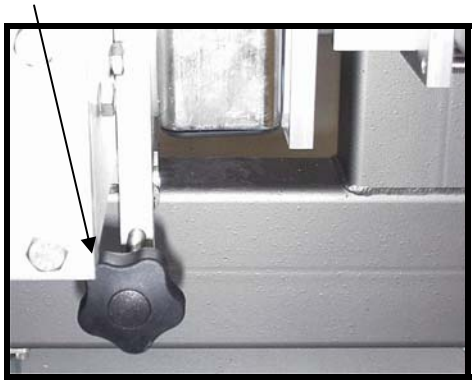


Fig.3

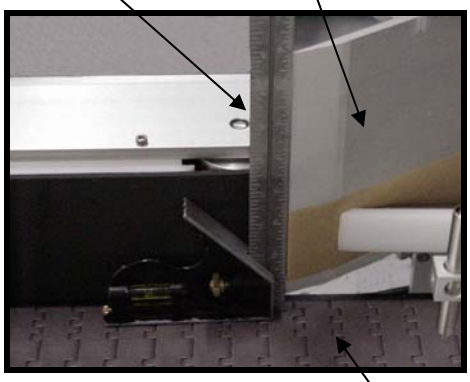


Fig.3a

To adjust across the conveyor, there is a knob in front of the applicator. Turning the knob clockwise will cause the applicator to tip inward. Turning the knob counter clockwise will cause the applicator to tip outward.
(See Fig.4 & 4a)

Fig.4

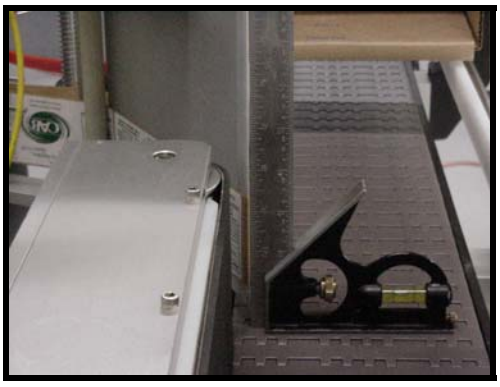


Fig.4a

Conveyor

1. With power OFF, select the container to be labeled, place on conveyor for reference and adjust vertical height of guide rails. This is accomplished by loosening the ratchet handles at each guide rail mount. After adjusted, re-tighten ratchet handles. **(See Fig.5)**

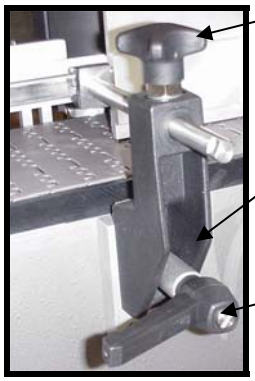


FIG.5

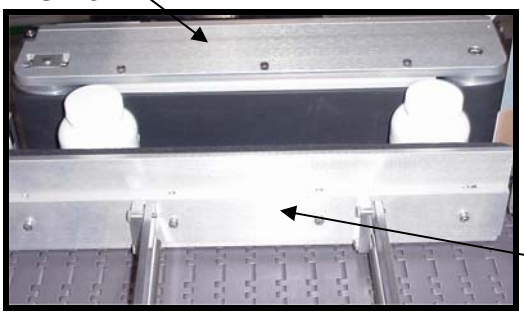


Fig.6

Put two containers on conveyor in front of the Turning Unit. **(See Fig.6)** Adjust the cross adjust of the guide rail by loosening the knob at the top or side of each guide rail mount. **(See Fig.5)** Slide Backing Plate up to containers until snug. After adjusted, re-tighten knob. **(See Fig.7)** Adjust the entrance and exit guide rails in the same manner, but to be a loose fit.

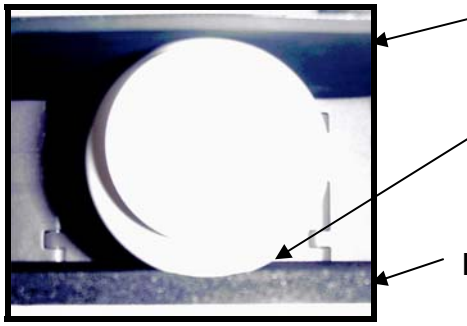


Fig.7

ADJUSTING THE TURNING UNIT

1. To do this, loosen the knobs under the Turning Unit. Move the Turning Unit to the desired position and re-tighten the knobs. **(See Fig.8)**
2. The turning unit needs to remain at a slight decline, relevant to the product flow, to the top of the conveyor **(Ref. Fig. 8a)**. If the turning unit is inclined, the container will want to rise up off the conveyor, which will wrinkle or cause skewing to the label. *Excessive* decline will wrinkle the label or cause the label to be skewed (1/16" – 1/8" is recommended). Determine if the turning unit needs to be adjusted. Then loosen the (8) 10-32 socket head cap screws that secure the (4) backing plate guides. Adjust the turning unit until container runs true. With your fingers, squeeze the backing plate guides up against the unit mounting posts and re-tighten the screws that secure them. **(See Fig.8)**

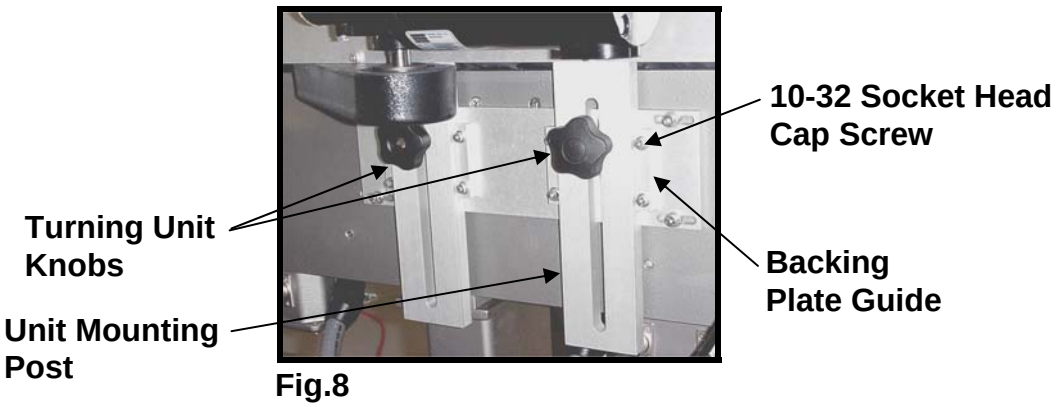


Fig.8

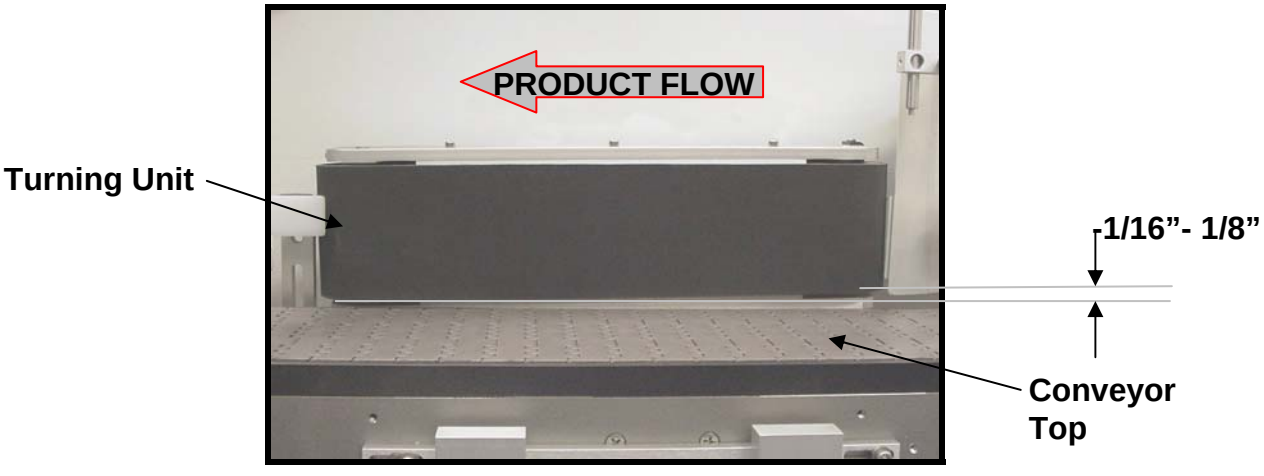


Fig.8a

3. After adjusting Turning Unit height, you will also need to adjust the height and tilt of the Turning Unit Backing Plate assembly. Loosen the ratchet handles at each guide rail mount and move the assembly up or down to desired height. To adjust the tilt of the assembly, loosen the two small ratchet handles and tilt the Backing Plate assembly in or out depending on the container that is to be labeled. **(See Fig.9)**

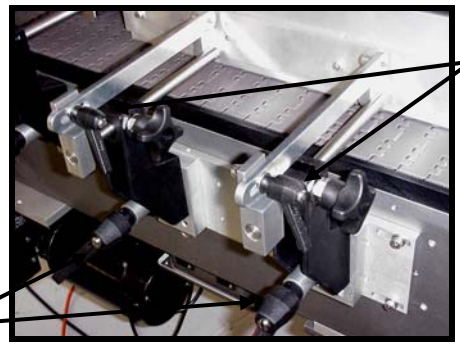


Fig.9

ADJUSTING PRODUCT SENSOR

1. With power off, Place container at the entrance side of the Turning Unit. The Fiber Optics of the Product Sensor needs to be in the center of and as close to but not touching the container. There are three Ratchet Handles to accomplish this. **(See Fig.10 & 10a)**

Fig.10

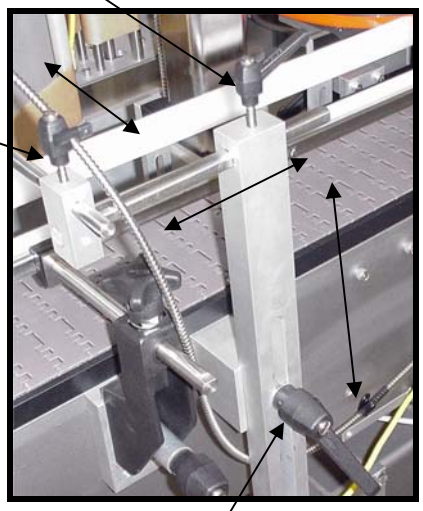


Fig.10a

2. After the Product Sensor is adjusted to the container, turn power to the system on by pulling Red Emergency switch out, the Red light turns OFF, turn Main switch ON. Turn Conveyor, Product Spacer and Turning Unit switches to the OFF position, leaving the Applicator switch in the ON position. Turn OFF motor switch on the label applicator.
3. Place container under Fiber Optic Sensor. The sensor that the Fiber Optic Cable is attached to needs to be set. It is located on the front of the conveyor. On the sensor are a Yellow and a Blue button. Depress either Yellow or Blue button for three seconds. Yellow button provides Light "On" Output (Leading Edge). Blue button provides Dark "On" Output (Trailing Edge).
   NOTE: If required, use "Up" or "Down" to tweak adjustment. Turn motor switch on the label applier back ON. **(See Fig.11)**

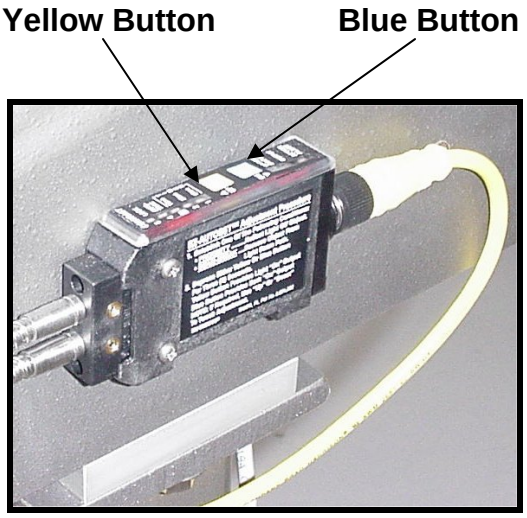
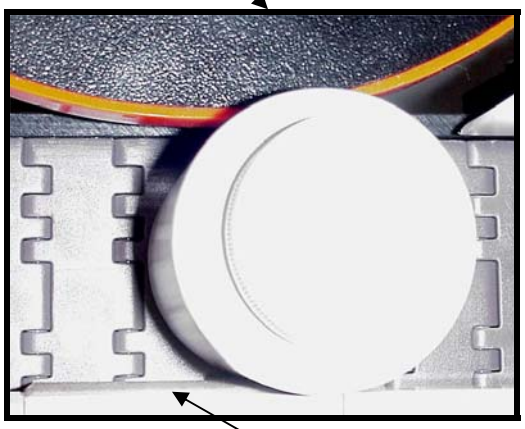


Fig.11

ADJUSTING PRODUCT SPACER

The Product spacer meters the spacing between the containers that are being labeled. The diameter of the container and the label length is what determines the spacing. If you have a 3” diameter container and a 1” long label, the spacing in between the containers would be shorter than if you had a 3” diameter container and a 9-1/2” long label for a total wrap. With power off, place a container in front of the product spacer and adjust until the container will not go past. **(See Fig.12)** To adjust Product Spacer across conveyor, use ratchet handle under Product Spacer Wheel. To adjust Product Spacer up or down, use ratchet handle that attaches the unit to the conveyor. **(See Fig.13)**

Product Spacer



Cork in front of Product Spacer

Fig.12

Cross Adjust

Height Adjust

Fig. 13

WEBBING THE L-15

1st. **Turn the Applier switch on the control enclosure off.**
2nd. **Do not use a label to attach the web to the rewind spool**; this will make the removal of the waste roll difficult.

Web the machine by looking at the webbing diagram located on the side of the L-15 body.

1. Mount the label roll to the unwind hub. Push label roll straight back against the unwind backing plate. Slide the label roll retainer onto the unwind hub until it contacts the label roll. Tighten thumb screw.
2. Remove approximately 30 inches of labels from label roll backing web.
3. Route the web over brake idler roll and between the idler roll and web drag then down through the Sensor. **(See Fig.14)**

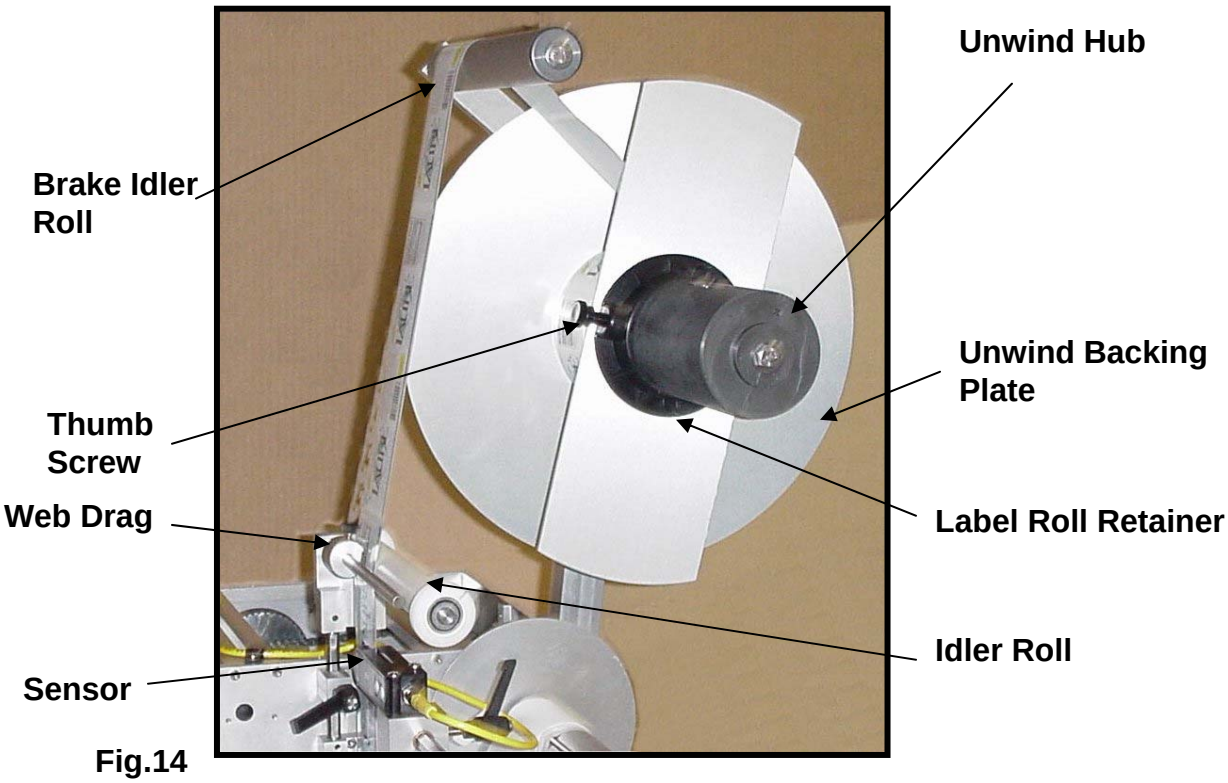


Fig.14

4. Route the web under the upper idler roll and peeler bar assembly tie bars, and continue between the pivot roller and peeler plate.
5. Pull the drive roll back, engage web lock link by pressing it down to release pressure on the drive roll.
6. Route the web over and around the drive roll
7. Then between the drive roll and the lower idler roll. (Silver Knurled roller)
8. Route the web back under the lower idler roll and the web stand-off stud.
9. Release web lock link by pulling back on the drive roll shaft.
10. Wrap the web over the top of the rewind spool and attach the web retention clip. **(See Fig.15 & 15a)**

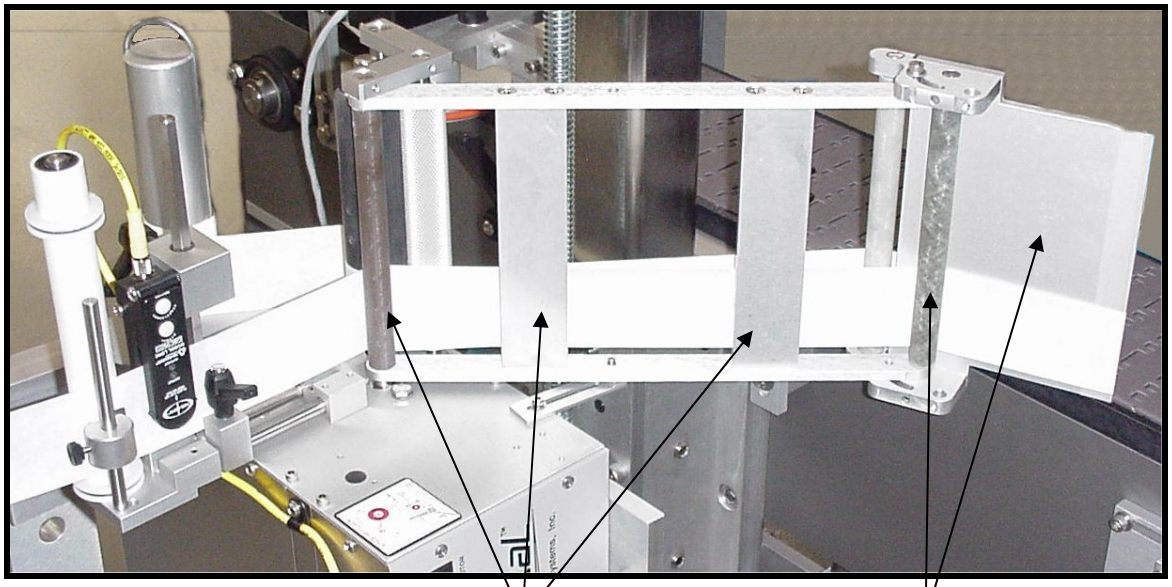


Fig.15

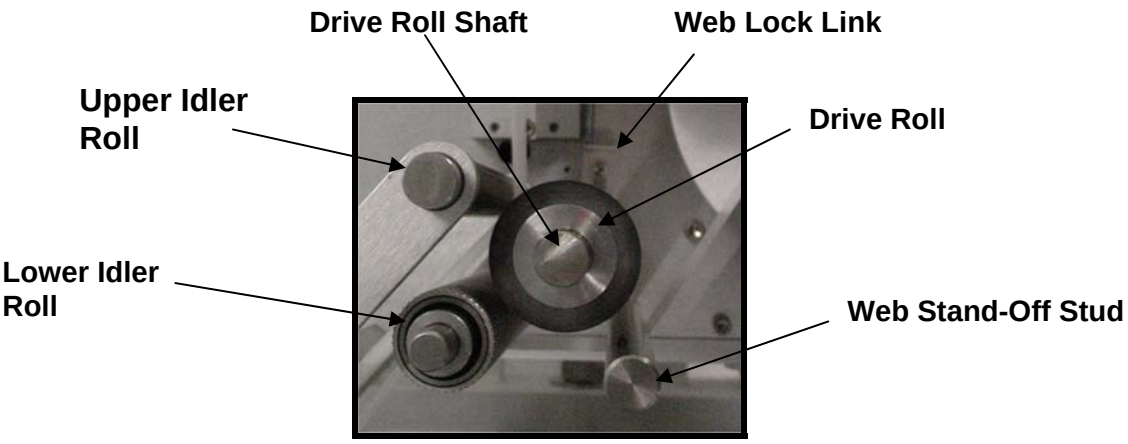


Fig.15a

Label stop position. Now that the machine is webbed, turn on both the main and motor switches.
Slide the Web back and forth so the “label GAP” is lined up with the white dot on the sensor.
Press the button on the sensor labeled “Normal”. The LEDS will start blinking and then Stop.
The GREEN LED is power for the sensor.
If you slowly move the label back and forth the RED LED should come on while the gap is in position. Moving the label so the GAP is out of position should make the RED LED go out. The Setup is now complete.

Activating the Product Sensor makes the label advance. The speed at which it advances is determined by the motor speed that is located on the control enclosure. The Label Sensor stops the label by detecting the gap between the labels.

Cycle the machine by activating the Product Sensor. The label should come off the web so it is completely dispensed. However, the next label should stop approx. 1/4” past the peeler tip. If label does not stop in proper place it can be adjusted two ways. **NOTE: The changing the speed of the applicator will affect the label stop position.**

1. Loosen the small ratchet handle at the Photo sensor. By moving it towards the unwind assembly it will make the label stop sooner. By moving it towards the peeler assembly, it will stop later **(See Fig.16)**
2. By adjusting the “OFF DELAY” on the front panel of the L-15. Turning the knob clockwise will make the label stop later.

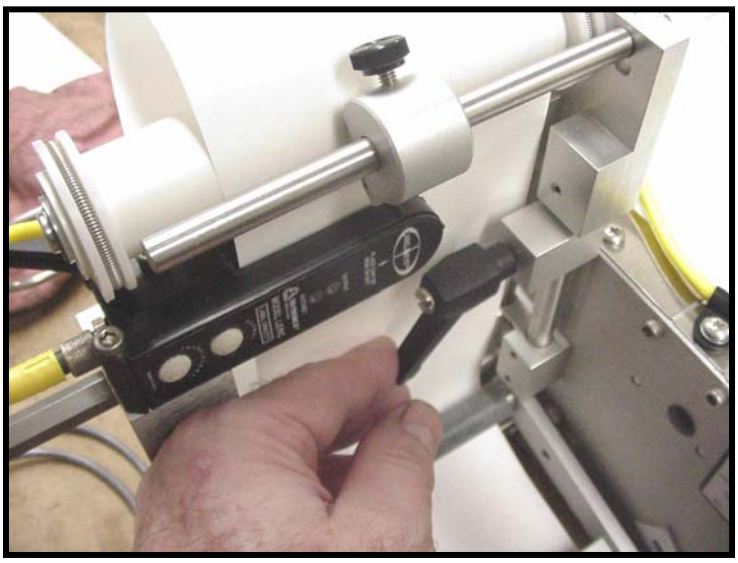


Fig.16

SPECIFICATIONS

SUPPLY VOLTAGE
- 10 to 30 VDC
- Polarity Protected

CURRENT REQUIREMENTS
- 45 milliamps (exclusive of load)

OUTPUT TRANSISTORS
- (1) NPN and (1) PNP output transistors
- Sensor outputs can sink or source up to 150 milliamps (current limit)
- All outputs are continuously short circuit protected

RESPONSE TIME
- Light state response = 100 microseconds
- Dark state response = 100 microseconds

LED LIGHT SOURCE
- High intensity red LED
- Pulse modulated

PUSH BUTTON CONTROL
- Automatic set-up routines based on web opacity
- One push button set-up
- Simultaneously pushing both buttons inverts the output

HYSTERESIS
- Minimal hysteresis promotes the detection between the backing material and the label depending on the settings

LIGHT IMMUNITY
- Responds to sensor's pulsed modulated light source … immune to most ambient light

INDICATORS
- Green LED flashes when Autoset™ routine is activated and stays illuminated when Autoset™ is completed
- Red LED illuminates when sensor's output transistors are "ON"
  Note: The status of the output transistors can be inverted by pushing both buttons simultaneously.

AMBIENT TEMPERATURE
- –40°C to 70°C (-40°F to 158°F)

RUGGED CONSTRUCTION
- Chemical resistance to harsh cleaners, such as detergents, alcohols, and ketones
- Waterproof ratings: NEMA 4 and IP66
- Conforms to heavy industry grade CE and UL requirements

Product subject to change without notice.

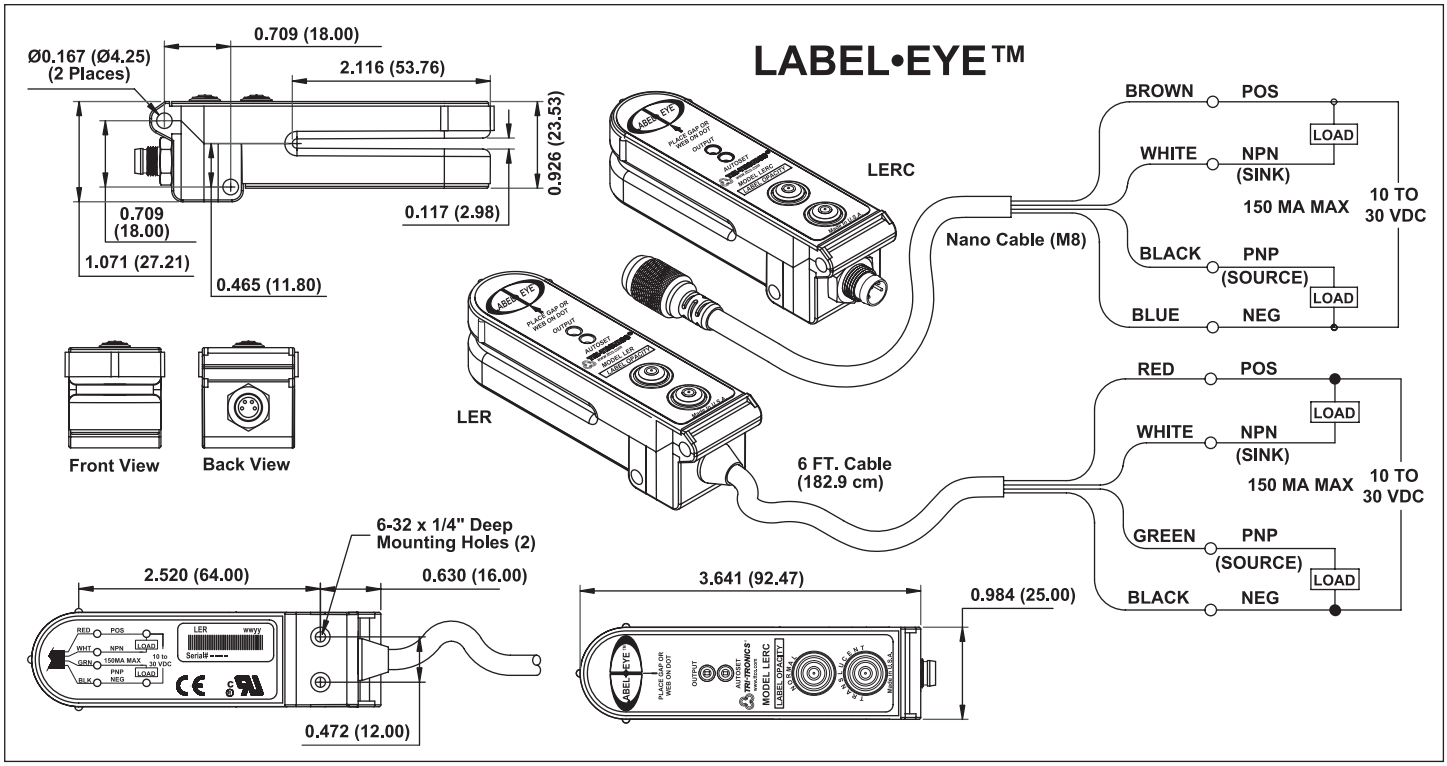
Model Numbers:

Label•Eye	Description
LER	Red LED, 4 conductor 6 ft. cable
LERC	Red LED, 4-pin Nano connector

Nano Cable (M8) Selection Guide

P/N	Length	Thread Coupling
GEC-6	6 ft. (1.8m)	Straight Female
GEC-15	15 ft. (4.6m)	Straight Female
RGEC-6	6 ft. (1.8m)	90° Female
RGEC-15	15 ft. (4.6m)	90° Female

DIMENSIONS



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SETTING THE SPEED OF THE R-320

1. Pull the Emergency Stop switch out (ON).
2. Turn the Main switch to ON.
3. Turn the Conveyor switch to ON. Determine the speed at which you want to run. Set the speed of the Conveyor using the speed control on the control enclosure.
4. Turn the Product Spacer switch to ON.
5. Turn the Turning Unit switch to ON.
6. Turn the Applier switch to OFF.
7. Adjust the speed of the Turning Unit using the speed control on the control enclosure. Adjust the speed so that when the container goes through the Turning Unit, the container stays at the same speed as the Conveyor. To do this, look down at the container and watch the links of the mat top chain on the Conveyor. They should be moving at the same rate of speed. **(See Fig.17)**.

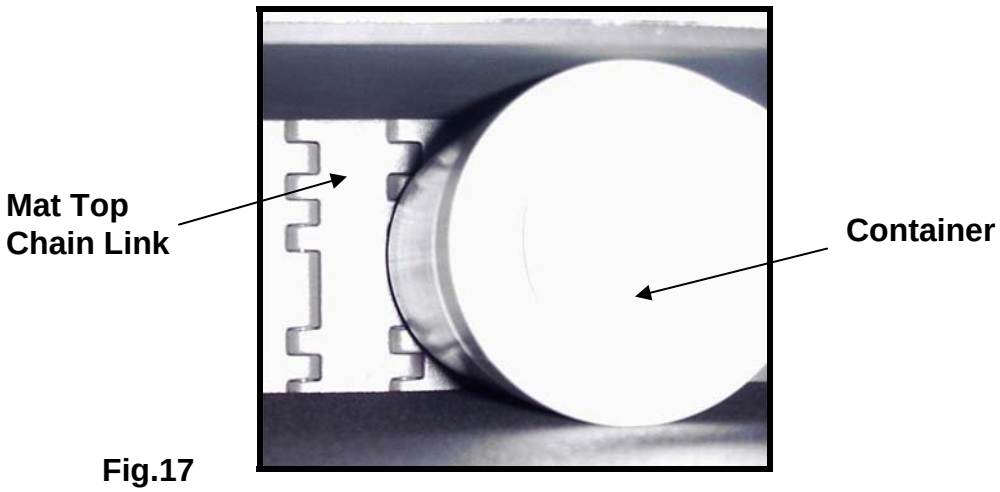


Fig.17

ADJUSTING THE PEELER ASSEMBLY

Now that the Conveyor and Turning Unit are speed matched, Adjust Peeler Plate so it is close but not touching the Turning Unit. The Peeler Assembly can be adjusted by loosening the Height Adjust Bracket and loosening the Peeler Plate Pivot Blocks. **(See Fig.18, 18a & 18b)**

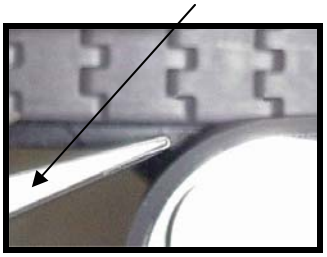


Fig.18

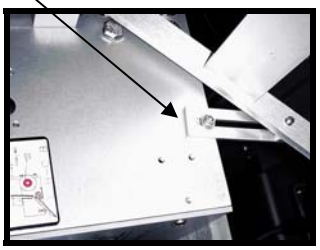


Fig.18a

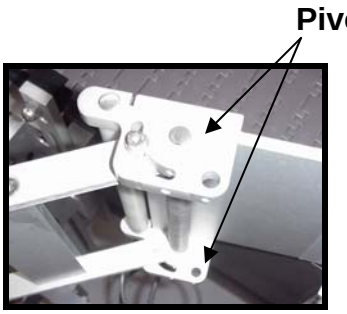


Fig.18b

SETTING THE SPEED OF THE L-15

1. Turn the Applier switch to ON.
2. Run one container down the conveyor. Watch when the label is applied. If the Turning Unit pulls the label from the peeler plate, the L-15 is going too slow. **(See Fig.19)** If the L-15 is pushing the label onto the container, the L-15 is going to fast. **(See Fig.19a)**

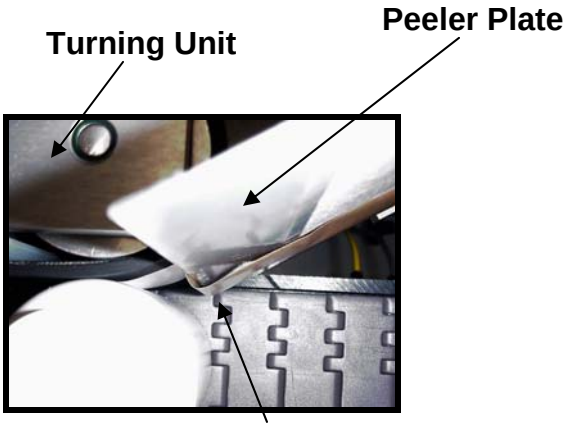


Fig.19 **Pulling Web**

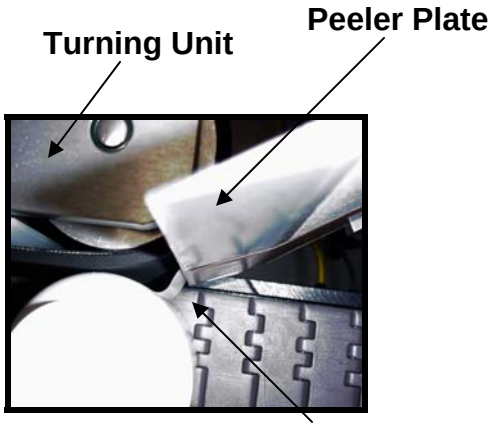


Fig.19a **Pushing Label**

3. If the web is being pulled, adjust the speed control of the L-15 up. If the label is being pushed, adjust the speed control of the L-15 down. Once these adjustments are made you should have a smooth label transfer.

ADJUSTING THE PRODUCT SENSOR POSITION

If the label transfer is smooth but is inconsistently applying the label, the product sensor needs to be adjusted. If the label dispenses too late, it will miss the container. **(See Fig.20)** If it dispenses too soon, the label will fold at the leading edge. **(See Fig.20a)**

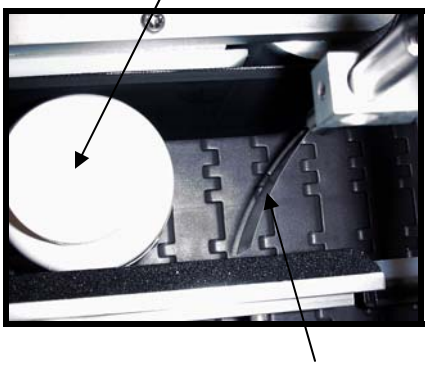


Fig.20

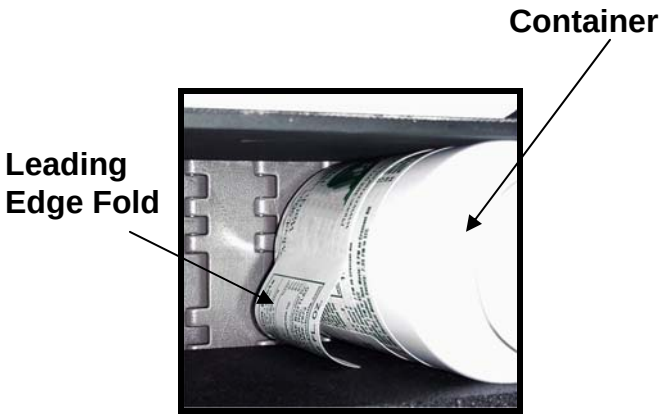


Fig.20a

If the label dispenses too late and misses the container, move the product sensor towards the entrance end of the conveyor. If the label dispenses too soon, move the product sensor towards the exit end of the conveyor. To do this loosen the small ratchet handle at the top of the Product Sensor Assembly. **(see Fig.21)**

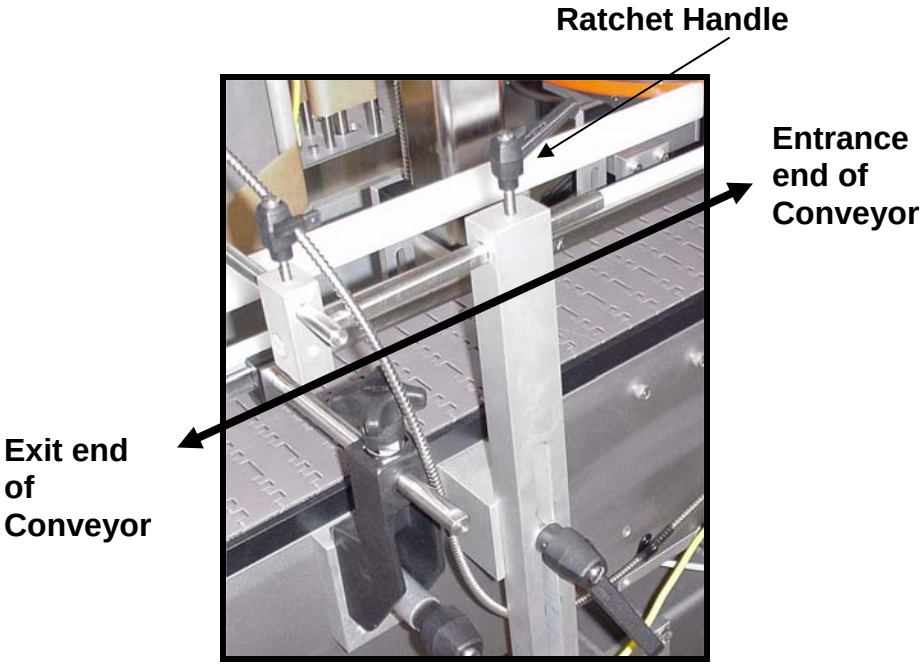


Fig.21

ADJUSTING THE LABEL HEIGHT OF THE L-15

Run one test container. Look at the label placement in reference to the height. If the label is too high, turn the applicator height adjust crank handle clockwise to lower the unit. If the label is too low, turn the crank handle counter clockwise to raise the unit. **(See Fig.22)**

Fig.22

CHECKING LABEL SKEW

After the height of the label is adjusted to the container, check the skew of the label by comparing the leading edge of the label to the trailing edge of the label. The leading edge is the part of the label that was applied first. The label below is skewed down. **(See Fig.23)**

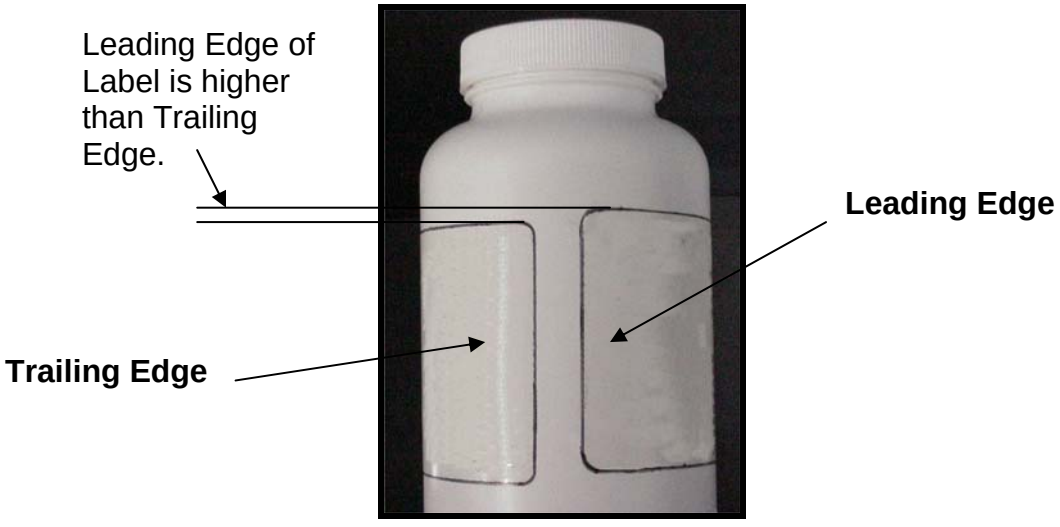


Fig.23

ADJUSTING LABEL SKEW

If the label is skewed either up or down, the applicator needs to be re-adjusted for the skew. To do this, there is a knob under the applicator. Turning the knob clockwise will cause the applicator to tip forward. This will cause the trailing edge of the label to go up. Turning the knob counter clockwise will cause the applicator to tip backwards. This will cause the trailing edge of the label to go down. **(See Fig.24)**

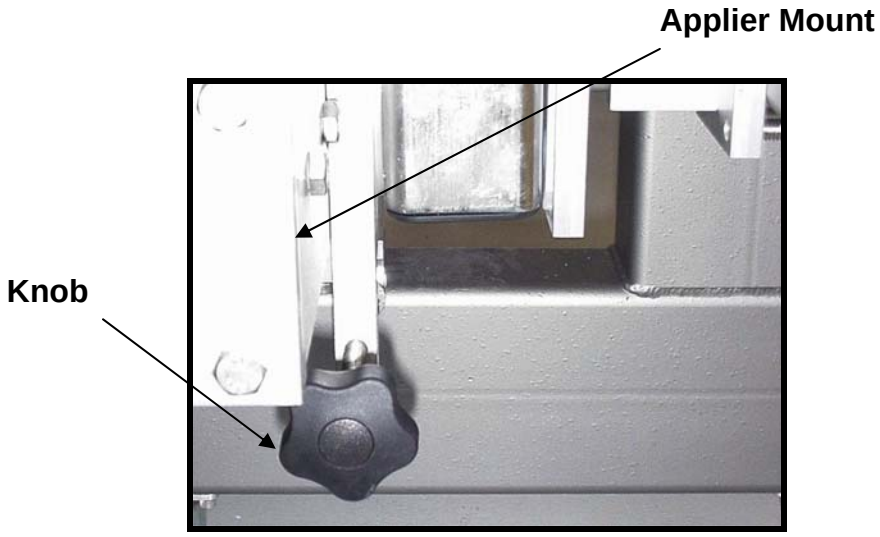


Fig.24

PEELER PLATE ANGULAR ADJUSTING

The peeler plate needs to be square with the container. If the container is slightly irregular, you can adjust for this with the peeler plate angular adjust. To do this, there is a knob in front of the applicator. Turning the knob clockwise will cause the applicator to tip inward. Turning the knob counter clockwise will cause the applicator to tip outward. **(See Fig.25)**

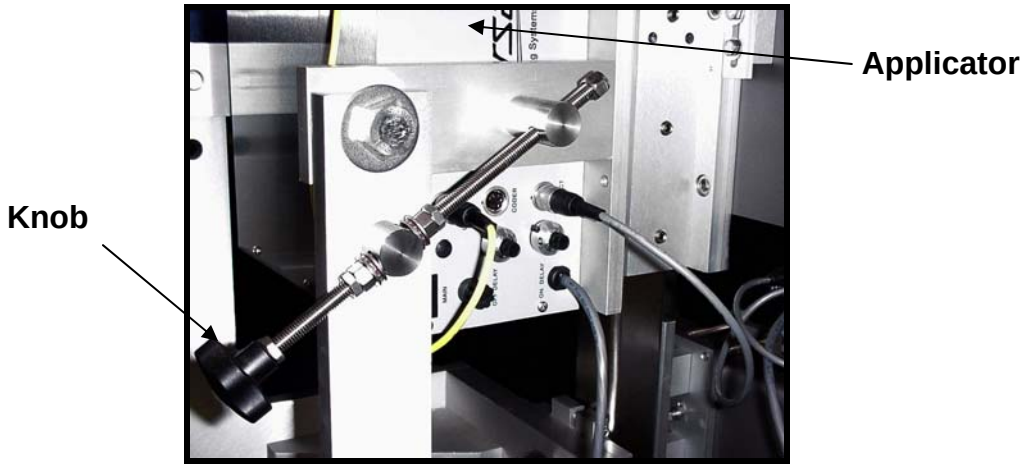
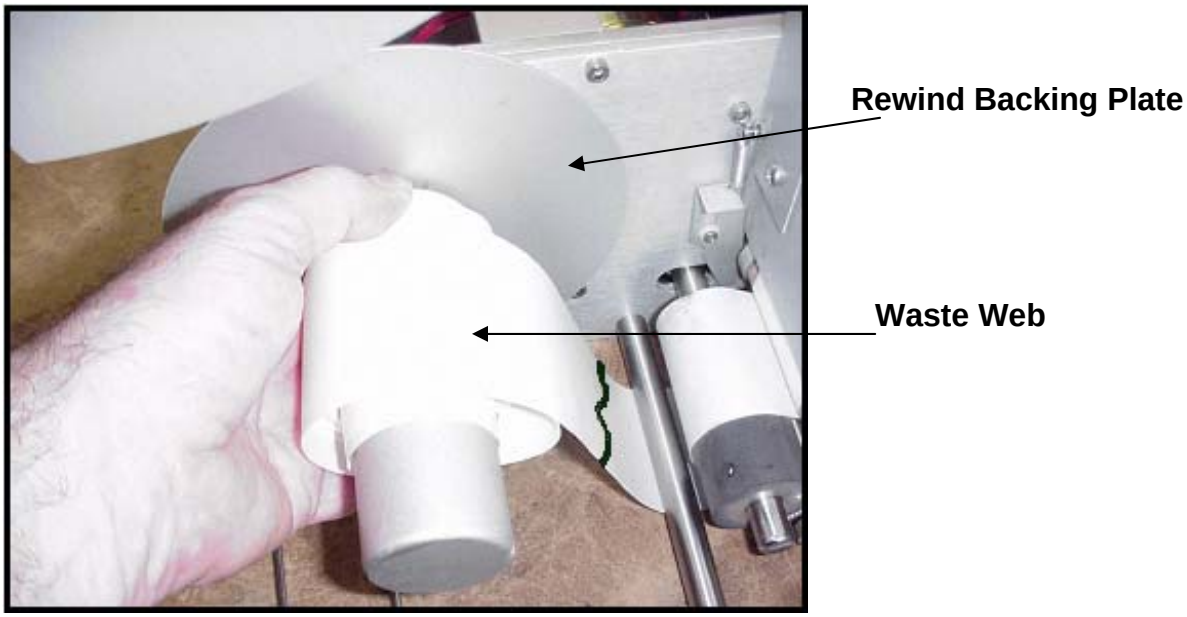


Fig.25

WASTE WEB REMOVAL



1. To remove waste web, turn off the machine, and remove the web retention clip.
2. Tear the web first.
3. While holding the rewind backing plate, turn the whole waste web in the opposite direction and pull.

OPTIONAL LION SENSOR (Clear Labels)

Important:

- Web must remain in contact with mounting plate.
- Label must pass under the sensor indicator
- Small labels should be centered under sensor.
- When properly setup, the lights will move between WEB and LABEL. The lights in the "X" region should only light briefly during the transition between WEB and LABEL.

Basic (Low Gain) Setup (effective for 90% of labels):

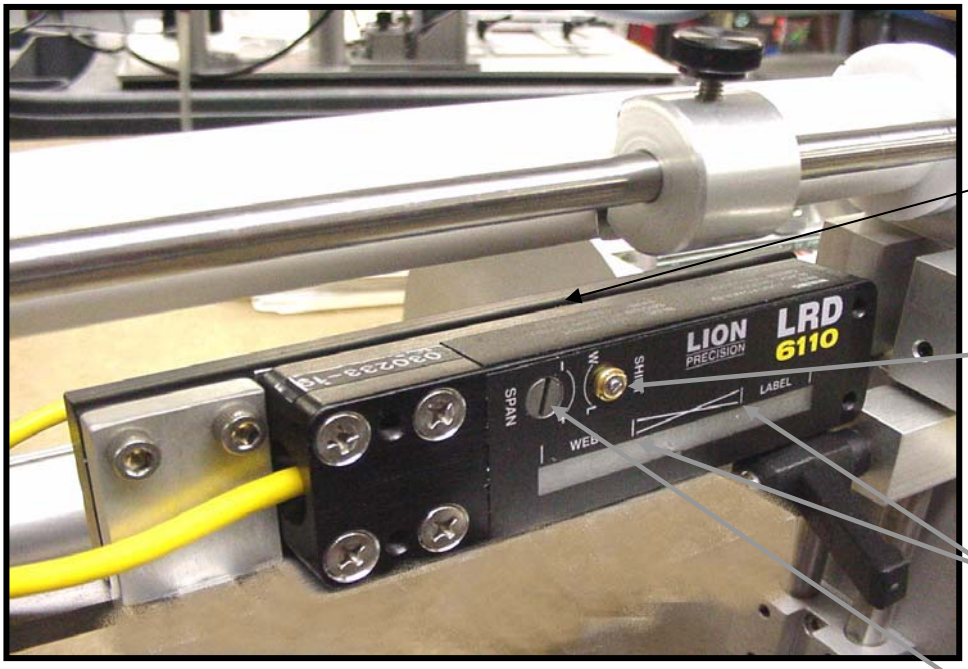
1. Adjust SPAN to minimum (four turns counter-clockwise)
2. While moving labels through the sensor.
    a. Adjust shift toward L (LABEL) until the last web light does NOT light.
    b. Adjust shift toward W (WEB) until the last web light DOES light.
3. Setup complete.
4. If there is any false triggering, missed labels, or lights in the **"X"** region except during transition, change to medium gain setup. **(See Fig.26)**

Basic Gain Setup:

1. Adjust SPAN to mid-point (four turns counter-clockwise, two rotation clockwise)
2. Repeat steps 2 & 3 from Basic setup above.
3. If there is any false triggering, missed labels, or lights in the **"X"** region except during transition, change to high gain setup. **(See Fig.26)**

High Gain Setup:

1. Adjust SPAN to maximum (four turns clockwise)
   Repeat steps 2 & 3 from Basic setup above. **(See Fig.26)**



Mounting Plate

"SHIFT"

"X" area

"SPAN"

Fig.26

LION PRECISION LRD6110 UNIVERSAL LABEL SENSOR

INSTRUCTION SHEET M015-3380.06

Introduction:

The LION PRECISION LRD6110 LABEL REGISTRATION AND DETECTION SYSTEM is an electronic capacitance-based sensor used to monitor label registration and/or count labels. The sensor will output a signal indicating the leading or trailing edge of the label as it passes through the sensor.

Electrical Connections

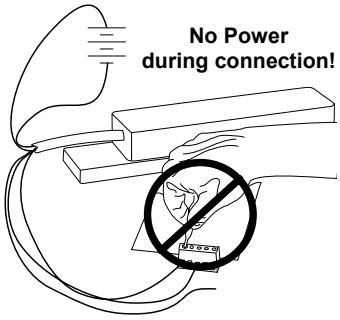
Warnings:

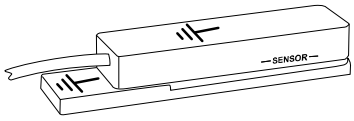
Unused wires must be insulated from contact with other objects.

All power must be off when installing the sensor.

DC Ground is connected to sensor body.

Brown wire must be connected to +V or Ground for reliable operation.



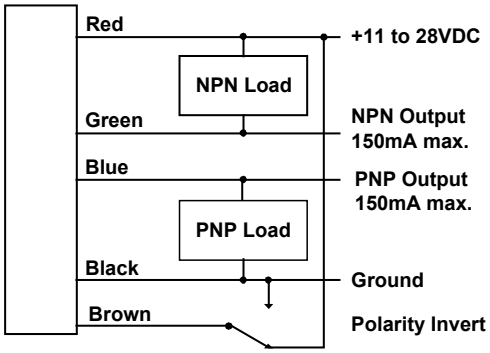


Sensor case is grounded

Wiring

Wire Color	Connection	Notes
Red	+Vin (11-28VDC)	50mA max.
Black	Ground	Connected to sensor body
Green	NPN Output	150mA max.
Blue	PNP Output	150mA max.
Brown	Output Polarity (light/dark switching)	+V or Ground See fig. 2 on back

Warning: Brown wire must be connected to +V or Ground for reliable operation.



Power supply	Voltage	11-28 VDC (reverse polarity protected)
	Current	50mA
Response time	on or off	10µs max
	Switching Frequency	10kHz max
Output	Output Current (sinking or sourcing)	150mA max (overload protected)
	Switching output	PNP or NPN, dark or light switching
Temperature	Operating Range	40°F to 140°F (4°C to 60°C)
Protections	Supply	Inverse Polarity Protection
	Switching output	Short Circuit and Overload Protection

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SECTION 4 TROUBLESHOOTING

No power to entire system:

1. Is the emergency switch on the control enclosure pulled out?
2. Is the main switch on the control enclosure “On”?
3. Do all switches in the control enclosure have continuity? Check with ohmmeter.
4. Is the main fuse in the control enclosure good? Check with ohmmeter.
5. Is the master control relay in the control enclosure working? When main switch is turned “On”, it should engage.
6. Is power at power cord? Check with ohmmeter.

No power to conveyor motor:

1. Is the conveyor switch on the control enclosure “On”?
2. Is the neutrik connector at the end of the motor cord plugged into the junction box at the bottom of the conveyor?
3. Is the conveyor fuse in the control enclosure good? Check with ohmmeter.
4. Is there DC voltage to motor? Check with ohmmeter.

No Power to product spacer motor:

1. Is the product spacer switch on the control enclosure “On”?
2. Is the neutrik connector at the end of the motor cord plugged into the junction box at the bottom of the conveyor?
3. Is the product spacer fuse in the control enclosure good? Check with ohmmeter.
4. Is there DC voltage to motor? Check with ohmmeter.

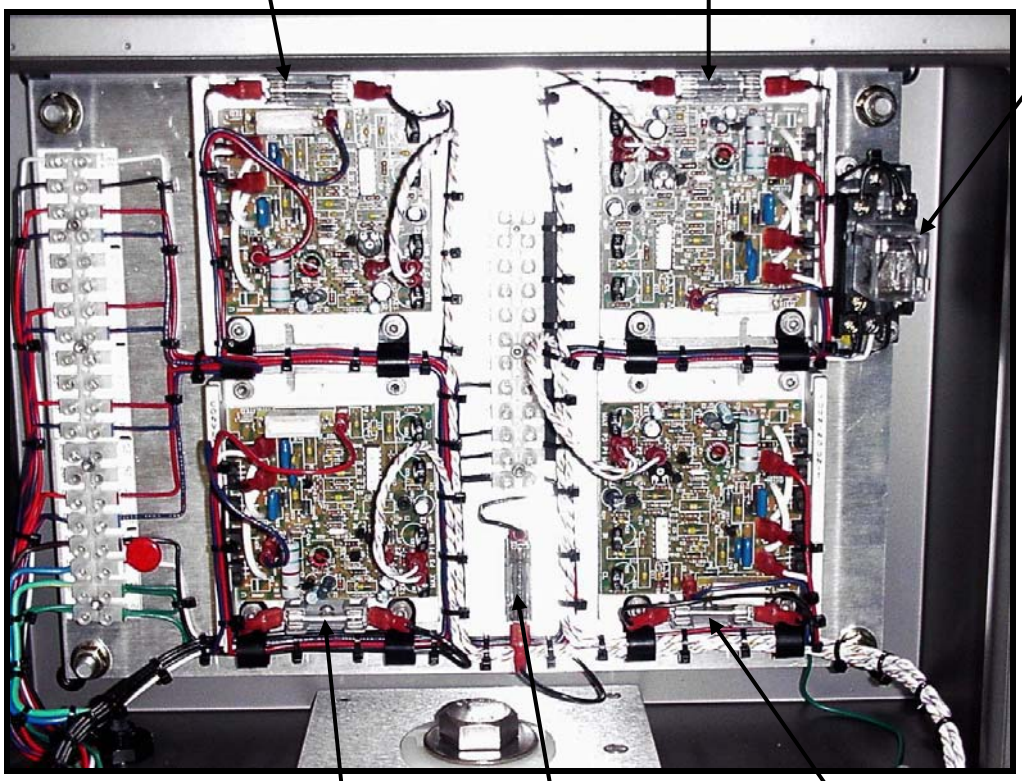
No power to turning unit motor:

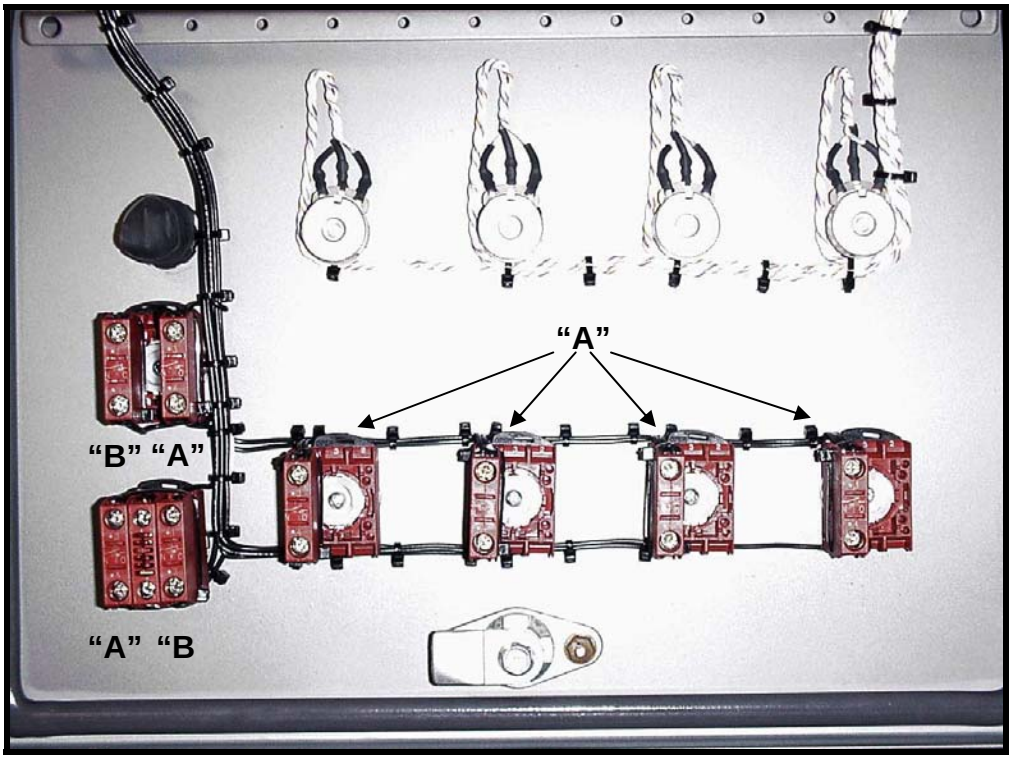
1. Is the turning unit switch on the control enclosure “On”?
2. Is the neutrik connector at the end of the motor cord plugged into the junction box at the bottom of the conveyor?
3. Is the turning unit fuse in the control enclosure good? Check with ohmmeter.
4. Is there DC voltage to motor? Check with ohmmeter.

No power to applier:

1. Is the applier switch on the control enclosure “On”?
2. Is the motor switch on the applier “On”?
3. Is the applicator fuse in the control enclosure good? Check with ohmmeter.
4. Is the fuse in the applicator good? Check with ohmmeter.
5. Is the neutrik connector at the end of the motor cord plugged into the junction box at the bottom of the conveyor?
6. Is there DC voltage to motor? Check with ohmmeter.

CONTROL ENCLOSURE LAYOUT





N.O. Contact Marked "A" N.C. Contact Marked "B"

PROBLEM WITH WRINKLE OR SKEWED LABEL

The turning unit must be adjusted properly to the top of the conveyor. If the turning unit is tilted up, the container will want to rise up off the conveyor, which will wrinkle the label. Same problem, if the turning unit is tilted to far down it will wrinkle the label or cause the label to be skewed. **(See Fig.8a)**

The backing plate must be adjusted properly. Too much pressure will squish the bottle and cause wrinkles. Not enough pressure and the label will not be wiped down properly. **(See Fig.7)**

If the label is skewed one way or the other way (running up hill or down hill) and it is doing it consistently, use the skew adjustment to get the label on properly. **(See Fig.24)**

The applicator should be square to the container. If the container has a taper to it then the applicator angle needs to match that taper. If the container is at 90° angle to the conveyor then the applicator peeler plate needs to be at a 90° angle. **(See Fig.25)**

CONTAINERS NOT ALL GETTING LABELED

If containers are going threw and all containers are not getting labeled, you need to check to make sure the product sensor is working correctly. **(See Fig.11)** Also, product spacing may be too close together. A label has to be completely dispensed before the product sensor can send another signal to get another label to dispense. **(See Fig.12)**

LABEL NOT DISPENSING FROM APPLICATOR

Make sure that the applicator switch on the control enclosure is “On”. Make sure that the motor switch on the applicator is “On” and running. If motor is “On” and not running, check to make sure that the motor is getting DC voltage. If motor is running and the labels are not dispensing, check that there is DC voltage to the clutch brake. If there is no DC voltage to the clutch brake, re-seat the circuit board behind the front panel of the applicator. If there is still no DC voltage to the clutch brake, check for AC voltage at the transformer behind the front panel of the applicator. If there is AC voltage at the transformer, the circuit board is bad. Make sure that the web lock link is disengaged. Check to see if setscrews are tight on the drive roll.

LABEL DISPENSING FROM APPLICATOR CONSTANTLY

Make sure that the label web going threw the label sensor. Make sure that the label sensor is plugged into the applicator. Check the label sensor to see if it is working. Make sure that product sensor is not seeing the trailing edge of the label as it goes by. Try re-setting label sensor. **(See Fig.16)**

WASTE WEB NOT WINDING ON REWIND

Adjust rewind take-up. To adjust the rewind take-up, there is a jam nut on the opposite side of the rewind assembly. Loosen the jam nut. By turning the adjuster clock wise, it will increase the tension of the rewind.

SECTION 5 MAINTENANCE

SYSTEM MAINTENANCE

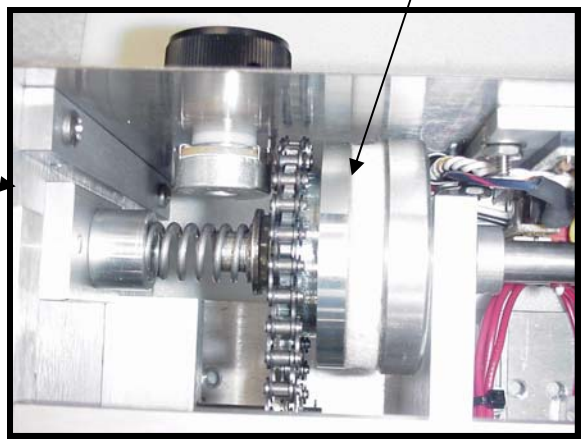
1. Lubricate bearings that are on the conveyor.
2. Keep conveyor mat top chain clean.
3. Check all motor brushes.
4. Clean turning unit belt.
5. Keep peeler tape on end of peeler plate clean and nick free or replace.
6. Check that nuts and bolts are tight.
7. Keep fiber optics of the product sensor clean.

1. Remove the Top covers of L-15.
2. Apply a small amount of grease to the felt of the Rewind Sprocket Assembly by moving Rewind Sprocket Assembly towards outside of machine
3. Check Chain tension and lightly grease if dry. Chain should deflect 1/8" to 1/4".
4. Check Gears and Sprockets for wear.
5. Clean Drive and Idler Rollers if dirt and label adhesive is present.

1/8” to ¼” Chain Deflection

Rewind Sprocket Assembly Felt

Outside of Machine



RECOMMENDED SPARE PARTS

Revised: 12/8/2004 4:30 PM

PART #	PART DESCRIPTION
200006	SWITCH, DPST ROCKER (MAIN)
200007	SWITCH, SPST ROCKER (MOTOR)
200012	RELAY, 120V 50/60HZ.
200042	FUSE, AGC 3A
200046	FUSE, AGC 10 A
200109	SWITCH, MICRO (STARWHEEL) (IF EQUIPPED)
200160	TRANSFORMER, 12-VOLT
200198	POWER MODULE
200272	BLOCK, N/O CONTACT
200273	BLOCK, N/C CONTACT
200409	CLIP, CORE (FOR HUB)
210025	CABLE, FIBER OPTIC "Y"
210120	SENSOR, SMARTEYE EZPRO (EZPRC)
300001	MOTOR, 1/15 HP (1800 RPM)
300013	BRUSHES, FOR MOTOR #300001
300023	BRUSHES, FOR MOTOR #300012,
420210	UNWIND SPRING, ½" X 4" EXTENSION
500030	CLIP, PLASTIC COMPRESSION
500085	HANDLE, 3/8 MALE RATCHET
600229	BELT, TURNING UNIT 2"
600230	BELT, TURNING UNIT 4"
600300	PEELER PLATE TAPE (50' ROLL)
820000	THUMBSCREW, 1" BLACK NYLON
200203E	SPEED CONTROL, KB DRIVE
200374-1	LABEL SENSOR, TRI-TRONICS LABEL EYE
200376B	ASS'Y, CABLE W/ 4 PIN AMPHENOL
210131B	ASS'Y, CLEAR/FOIL LABEL SENSOR (IF EQUIPPED)
330007A	ASS'Y, 1/2" CLUTCH/BRAKE
600390A	PAD, PRODUCT SPACER BACKING
L-128-C-A	CLIP, (6-1/2" WEB) RETENTION
L-129-S	STARWHEEL, LABEL SENSING (IF EQUIPPED)
L-132	ASS'Y, IDLER / TENSIONER
L-137-H-06.000	ROLLER, 6" L. X 1/2" I.D.DRIVE
L-143-06.000	ROLLER, 6" LOWER IDLER (KNURLED ALUMINUM)
L-175-1	ASS'Y. REWIND SPROCKET W/FELT & BEARINGS

SECTION 6 DRAWINGS AND BILL OF MATERIAL

R-320 MAIN ASSEMBLY
See Drawing R320-I-00C

SENSOR BRACKET ASSEMBLY
See Drawing SBK-I-06

ADJUSTABLE BACKING PAD ASSEMBLY
See Drawing TA-I-40

CONTROL ENCLOSURE ASSEMBLY
See Drawing R320-I-11B

SWITCHING AND TIMING ASSEMBLY
See Drawing CW-I-00

TURNING UNIT ASSEMBLY
See Drawing TA-I-00B

APPLIER MOUNTING ASSEMBLY
See Drawing R320-I-30

CRANK ASSEMBLY
See Drawing CPSS-I-40

MA-300 Z-AXIS ADJUST ASSEMBLY
See Drawing MA3-I-00

PRODUCT SPACER ASSEMBLY
See Drawing PS3-I-01

CONVEYOR ASSEMBLY
See Drawing R320-I-10C

JUNCTION BOX ASSEMBLY
See Drawing R320-I-20

CONVEYOR BASE ASSEMBLY
See Drawing CPSS-I-10A

POWER MODULE SET UP
See Drawing L15-D-02

DIMENSIONAL DRAWING (6 FOOT SYSTEM)
See Drawing R320L6-L15-F-00

DIMENSIONAL DRAWING (8 FOOT SYSTEM)
See Drawing R320L8-L15-F-00

WEBBING DIAGRAM (OPTICAL)
See Drawing L15-W-00C

WEBBING DIAGRAM (OPTIONAL STAR WHEEL)
See Drawing L15-W-00

ELECTRICAL DIAGRAM
See Drawing R320-L15-E-00

Bill of Material

R320-I-00C

R-320 MAIN ASSEMBLY

MACHINE: R320

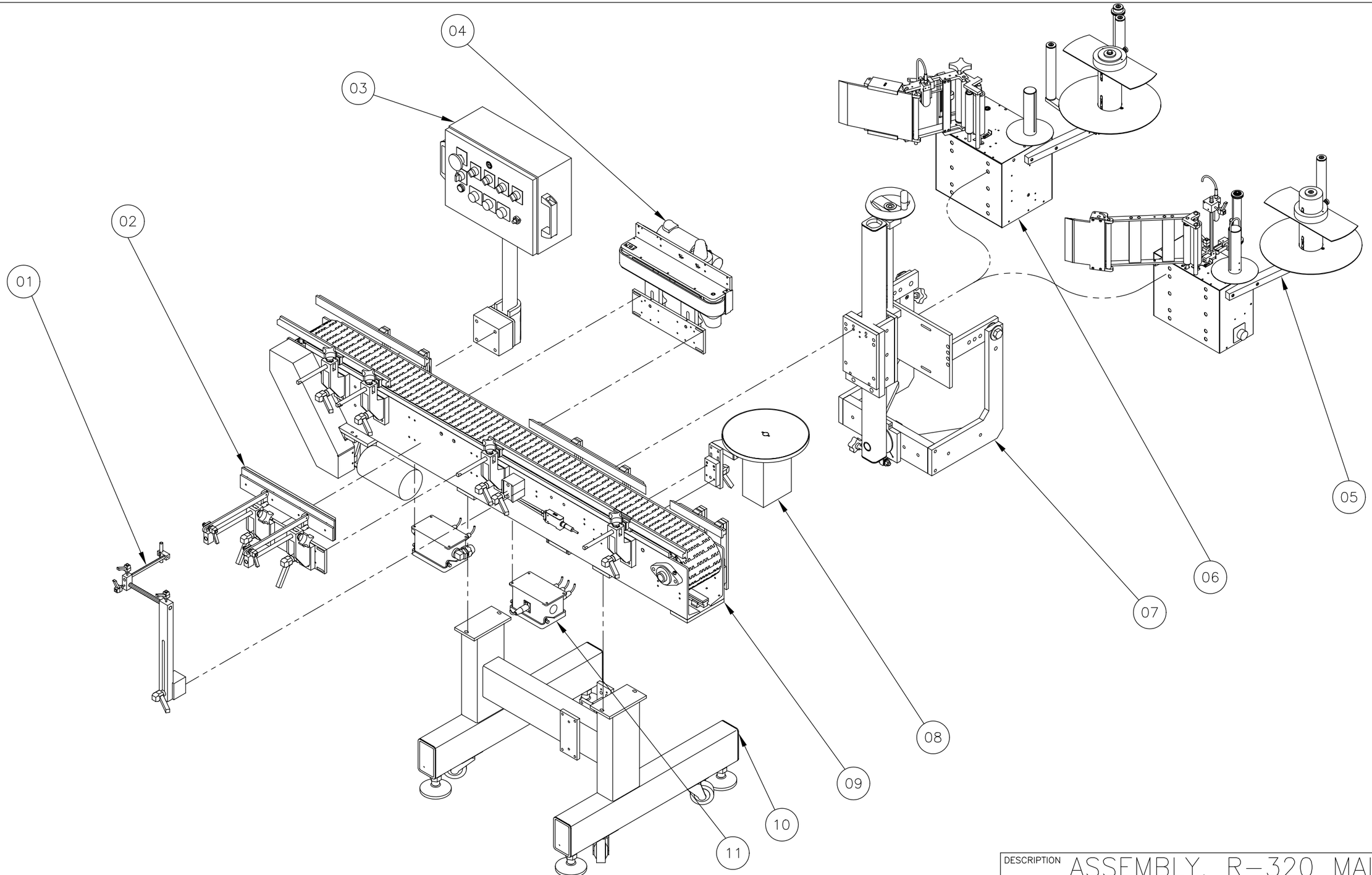
ITEM NUM:	PART NUMBER:	PART DESCRIPTION:	QTY:
01*	SBK-I-06	ASSEMBLY, SENSOR BRACKET	1
02*	TA-I-40	ASSEMBLY, ADJUSTABLE BACKING PAD	1
03*	R320-I-11B	ASSEMBLY, CONTROL ENCLOSURE	1
04*	TA-I-00B	ASSEMBLY, TURNING UNIT	1
05**	L-15	SEE L-15 MANUAL	1
06***	SL-1000	SEE SL-1000 MANUAL	1
07*	R320-I-30	ASSEMBLY, APPLIER MOUNTING	1
08*	PS3-I-01	ASSEMBLY, PRODUCT SPACER	1
09*	R320-I-10C	ASSEMBLY, CONVEYOR	1
10*	CPSS-I-10A	ASSEMBLY, CONVEYOR BASE	1
11*	R320-I-20	ASSEMBLY, JUNCTION BOX	1

NOTES:

*** SEE DRAWING**

**** R-320 WITH L-15 APPLIER**

***** R-320 WITH SL-1000 APPLIER**



–	—	—	—	—	—
REV	DATE	ECO	REVISION RECORD	CHANGE BY	CHKD BY

DESCRIPTION ASSEMBLY, R-320 MAIN

PRODUCT R-320 ROUND PRODUCT LABELING SYSTEM

DRAWN BY M.E.M.

DATE 09/04/2003

JOB NUMBER

PART NUMBER

universal LABELING SYSTEMS INC.

3501 8TH AVENUE SOUTH
ST. PETERSBURG, FLORIDA 33711
TEL. (727) 327-2123

PRINT NUMBER R320-I-00C

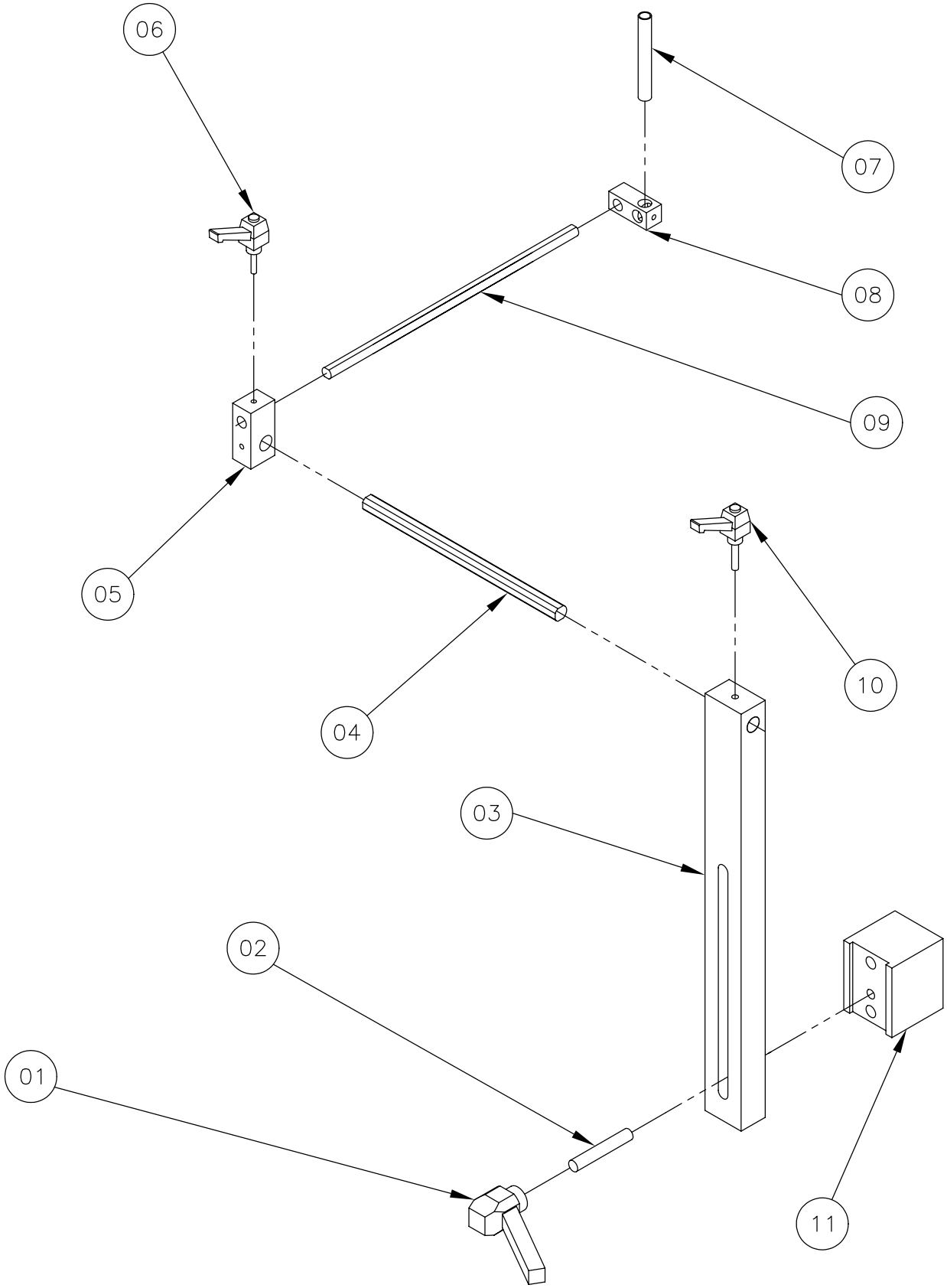
Bill of Material

SBK-I-06

SENSOR BRACKET ASSEMBLY

MACHINE: R320

ITEM NUM:	PART NUMBER:	PART DESCRIPTION:	QTY:
01	500084	HANDLE, 3/8 FEMALE RATCHET	1
02	SBK-036	BOLT, MICROMETER ADJUSTMENT	1
03	SBK-031	BAR, SENSOR MOUNTING	1
04	SBK-027	SHAFT, HORIZONTAL ADJUSTING	1
05	SBK-030	BLOCK, SENSOR	1
06	500081	HANDLE, 10-32 MALE RATCHET	1
07	500041A	TUBE, SENSOR HOLDER	1
08	SBK-032	BLOCK, FIBER OPTIC MOUNTING	1
09	SBK-033	SHAFT, HORIZONTAL ADJUSTMENT	1
10	500080	HANDLE, 1/4 MALE RATCHET	1
11	SBK-034	BLOCK, SENSOR MOUNTING	1



DESCRIPTION	ASSEMBLY, SENSOR BRACKET	PART NUMBER SBK-1-06
PRODUCT	CONVEYOR SYSTEMS	
DRAWN BY M.E.M.	JOB NUMBER	PART NUMBER
DATE 06/13/2003		

universal™ LABELING SYSTEMS INC.
3501 8TH AVENUE SOUTH
ST. PETERSBURG, FLORIDA 33711
TEL. (727) 327-2123

Bill of Material

TA-I-40

ADJUSTABLE BACKING PAD ASSEMBLY

MACHINE: R320

ITEM NUM:	PART NUMBER:	PART DESCRIPTION:	QTY:
01	500084	HANDLE, 3/8 FEMALE RATCHET	2
01*	500084	HANDLE, 3/8 FEMALE RATCHET	3
02	SS-124-2	ROD, 3/8 THREADED	2
02*	SS-124-2	ROD, 3/8 THREADED	3
03	CA-036	STANDOFF, RACHET HANDLE	2
03*	CA-036	STANDOFF, RACHET HANDLE	3
04	TA-245	BLOCK, BACKING PAD ADJUSTMENT	2
04*	TA-245	BLOCK, BACKING PAD ADJUSTMENT	3
05	TA-244	BAR, BACKING PAD ADJUSTER	2
05*	TA-244	BAR, BACKING PAD ADJUSTER	3
06	TA-242	BLOCK, BACKING PAD SUPPORT	2
06*	TA-242	BLOCK, BACKING PAD SUPPORT	3
07	855002	SHOULDER BOLT, 1/4 X 3/8" L.	4
07*	855002	SHOULDER BOLT, 1/4 X 3/8" L.	6
08	L-172-10	WASHER, UHMW 062 X 257 X 500	4
08*	L-172-10	WASHER, UHMW 062 X 257 X 500	6
09	TA-2-215A1	MOUNT, TURNING UNIT	1
10	CA-038	SPACER, 3/4"	2
10*	CA-038	SPACER, 3/4"	3
11**	R-320-005-A	PAD, 2" X 15" FOAM	1
11**	R-320-005-G	PAD, 3" X 15" FOAM	1
11**	R-320-005-B	PAD, 4" X 15" FOAM	1
11**	R-320-005-H	PAD, 5" X 15" FOAM	1
11**	R-320-005-C	PAD, 6" X 15" FOAM	1
11**	R-320-005-A-24	PAD, 2" X 24" FOAM	1
11**	R-320-005-G-24	PAD, 3" X 24" FOAM	1
11**	R-320-005-B-24	PAD, 4" X 24" FOAM	1
11**	R-320-005-H-24	PAD, 5" X 24" FOAM	1
11**	R-320-005-C-24	PAD, 6" X 24" FOAM	1
12**	R-320-004-A	PLATE, 2" X 15" BACKING	1
12**	R-320-004-G	PLATE, 3" X 15" BACKING	1
12**	R-320-004-B	PLATE, 4" X 15" BACKING	1
12**	R-320-004-H	PLATE, 5" X 15" BACKING	1
12**	R-320-004-C	PLATE, 6" X 15" BACKING	1
12**	T24-219	PLATE, 2" X 24" BACKING	1
12**	T24-319	PLATE, 3" X 24" BACKING	1
12**	T24-419	PLATE, 4" X 24" BACKING	1
12**	T24-519	PLATE, 5" X 24" BACKING	1
12**	T24-619	PLATE, 6" X 24" BACKING	1
13	TA-241	PLATE, BACKING PAD SUPPORT	1
14	TA-243	SHAFT, BACKING PAD ADJUSTMENT	2
14*	TA-243	SHAFT, BACKING PAD ADJUSTMENT	3
15	500045A	BRACKET,STD GUIDE RAIL	2
15*	500045A	BRACKET,STD GUIDE RAIL	3
16	500080	HANDLE, 1/4 MALE RATCHET	2
16*	500080	HANDLE, 1/4 MALE RATCHET	3

Bill of Material

TA-I-40

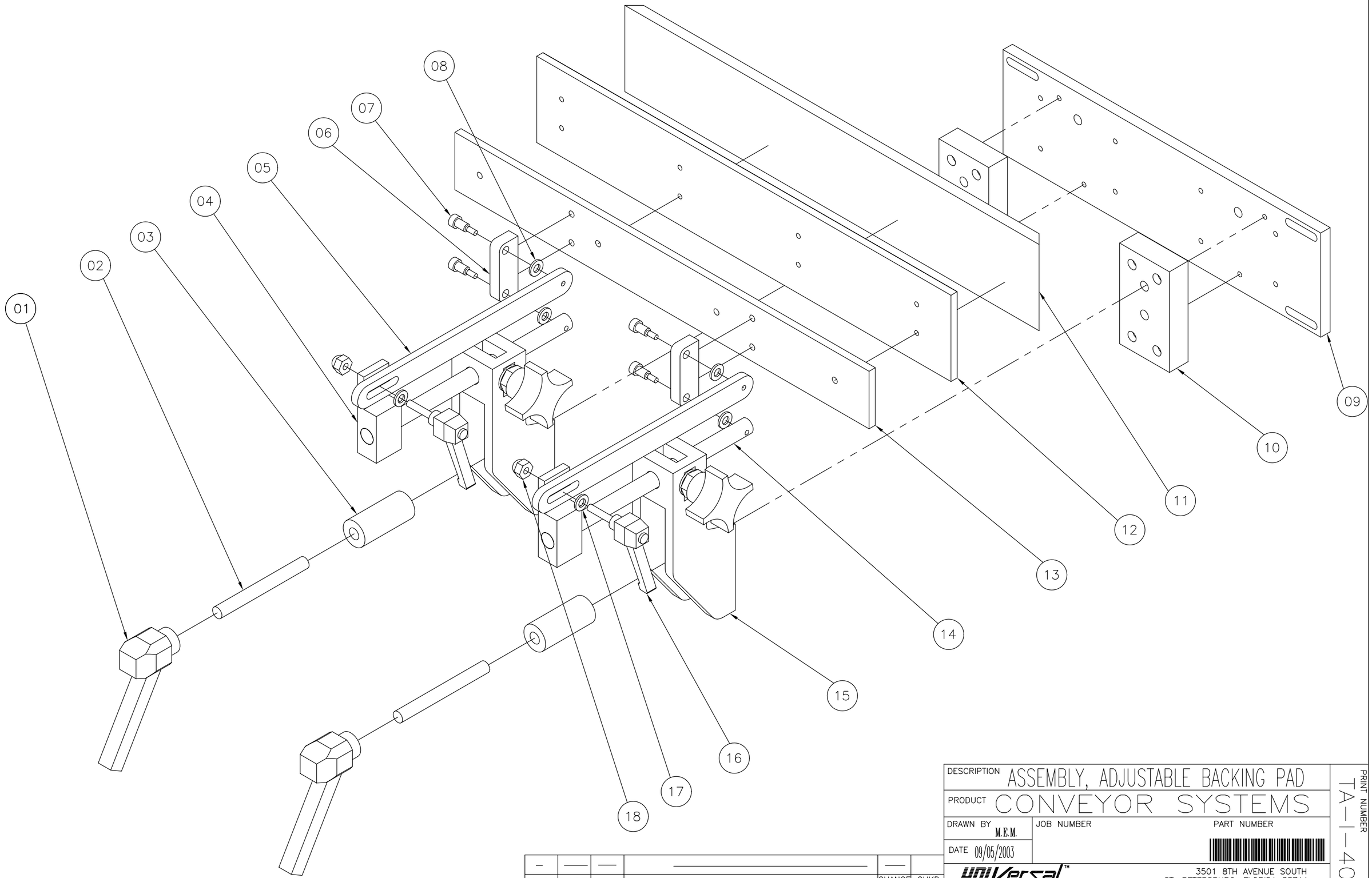
ADJUSTABLE BACKING PAD ASSEMBLY

MACHINE: R320

ITEM NUM:	PART NUMBER:	PART DESCRIPTION:	QTY:
17	853014	WASHER, 1/4" .060 THK 1/2 ODFW	2
17*	853014	WASHER, 1/4" .060 THK 1/2 ODFW	3
18	854012	NUT, 1/4-20 ACORN	2

*** OPTIONAL 24" TURNING UNIT**

**** PRODUCT SPECIFIC**



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REV	DATE	ECO	REVISION RECORD	CHANGE BY	CHKD BY

DESCRIPTION ASSEMBLY, ADJUSTABLE BACKING PAD

PRODUCT CONVEYOR SYSTEMS

DRAWN BY M.E.M.

DATE 09/05/2003

JOB NUMBER

PART NUMBER

PRINT NUMBER TA-1-40

universal™ LABELING SYSTEMS INC.

3501 8TH AVENUE SOUTH
ST. PETERSBURG, FLORIDA 33711
TEL. (727) 327-2123

Bill of Material

R320-I-11B

CONTROL ENCLOSURE ASSEMBLY

MACHINE: R320

ITEM NUM:	PART NUMBER:	PART DESCRIPTION:	QTY:
01	ES-I-01	ASSEMBLY, E-STOP	1
02	SW-I-02	ASSEMBLY, ACCESSORIES ON/OFF SWITCH	4
03	200012	RELAY, 120V 50/60HZ.	1
04	209021	SOCKET, RELAY	1
05	200021	STRIP, 8 TERMINAL EURO 40.208	1
06	230010G	CARD, 8 TERMINAL EURO MARKING	1
07	200255	STRIP, 12 TERMINAL EURO	2
08	230010	CARD, 12 TERMINAL EURO MARKING	2
09	200203C	SPEED CONTROL, KB DRIVE	1
10	200048	FUSE, MDL 1 1/2 A	1
11	200203A	SPEED CONTROL, KB DRIVE	1
12*	200042	FUSE, AGC 3 A	1
13*	200203E	SPEED CONTROL, KB DRIVE	1
14	SS-205	PLATE, BOX SUPPORT	1
15	UPA-305	SPACER, YOKE PLASTIC	1
16	400099	WASHER,1/8 X 3/4 X 1-7/8" SS	1
17	400100	SCREW, 3/4-10 X 1-1/2" HHMS	1
18	100700	HANDLE,ENCLOSURE	2
19	100502	ENCLOSURE, HOFFMAN C-SD16126	1
20	R-320-002	POST, CONTROL BOX MOUNTING	1
21	500056	BRKT, TOP, SIDE MOUNT	1
22	CA-033B	MOUNT, CONTROL ENCLOSURE	1
23	SS-206A	MOUNT, (CONVEYOR) CONTROL BOX	1
24	SS-204	SPACER, ANGULAR ADJUST. DISC	1
25	210060	RELIEF, 3/8" STRAIN	1
26	100192	CONNECTOR, STRAIGHT	1
27	SS-207	PIN, STOP	1
28	100500-C-P2	PLATE, COMPONENT MOUNTING	1
29	200187	FUSE, SLOW-BLO 5 AMP	1
30	200046	FUSE, AGC 10 A	1
31	200203B	SPEED CONTROL, KB DRIVE	1
32	200025	CLAMP, 3/8" CABLE-AMBER	8
33*	200240	HOLDER, FUSE/BASE MTG	5
33**	200240	HOLDER, FUSE/BASE MTG	4
34	200051	FUSE, MDL 2 1/2 A	4
35	209021-1	CLIP, RELAY SOCKET	2
36**	SC-I-02	ASSEMBLY, SL-1000 SPEED CONTROL	1
37*	SC-I-01	ASSEMBLY, ACCESSORIES SPEED CONTROL	4
37**	SC-I-01	ASSEMBLY, ACCESSORIES SPEED CONTROL	3
38	PL-I-01	ASSEMBLY, PILOT LIGHT	1
39	SW-I-01	ASSEMBLY, MAIN ON/OFF SWITCH	1

Bill of Material

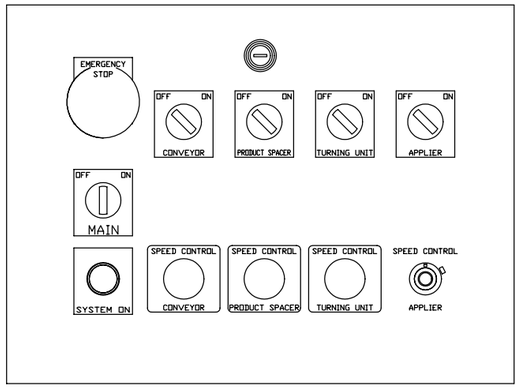
R320-I-11B

CONTROL ENCLOSURE ASSEMBLY

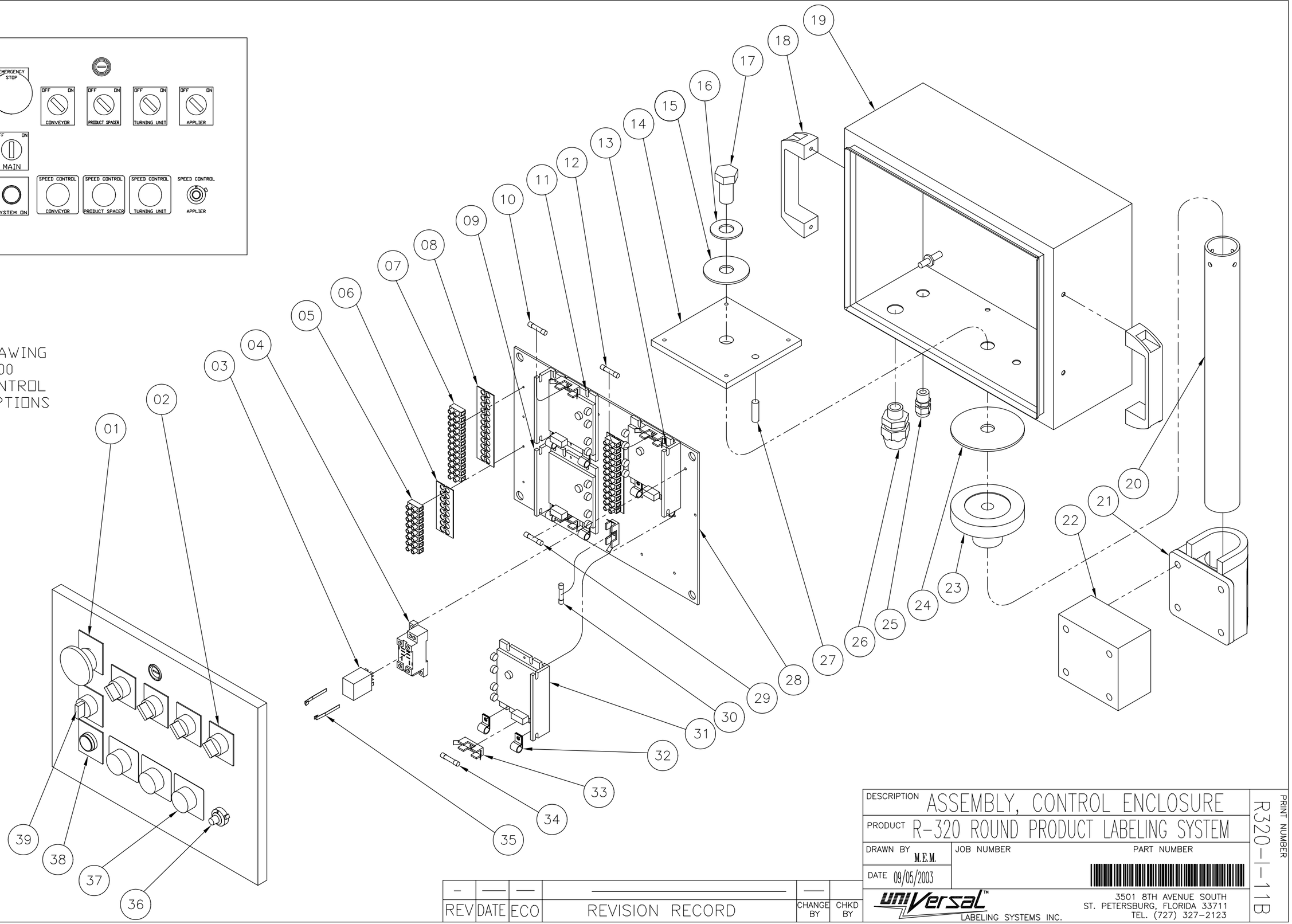
MACHINE: R320

ITEM NUM:	PART NUMBER:	PART DESCRIPTION:	QTY:

NOTE:
*** L-15 VERSION**
**** SL-1000 VERSION**



SEE DRAWING #CW-I-00 FOR CONTROL DESCRIPTIONS



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REV	DATE	ECO	REVISION RECORD	CHANGE BY	CHKD BY

DESCRIPTION ASSEMBLY, CONTROL ENCLOSURE

PRODUCT R-320 ROUND PRODUCT LABELING SYSTEM

DRAWN BY M.E.M.

DATE 09/05/2003

JOB NUMBER

PART NUMBER

universal™ LABELING SYSTEMS INC.
3501 8TH AVENUE SOUTH
ST. PETERSBURG, FLORIDA 33711
TEL. (727) 327-2123

PRINT NUMBER R320-I-11B

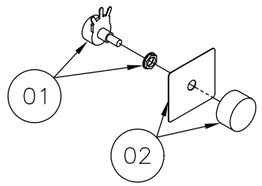
Bill of Material

CW-I-00

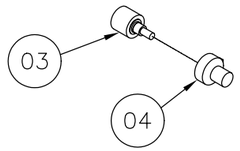
SWITCHING AND TIMING ASSEMBLY

MACHINE: R320

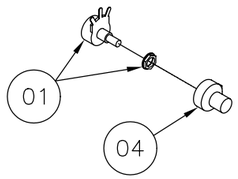
ITEM NUM:	PART NUMBER:	PART DESCRIPTION:	QTY:
01	200204	POTENTIOMETER, 5K LINEAR TAPER	
02	200205	KIT, KNOB DIAL	
03	200406	POT, 5K 10-TURN	
04	200192-1	DIAL, 10 TURN POT (H-22-6A)	
05	200216	POT, 5K OHM 3-TURN	
06	200404	POT, 10-TURN 10K	
07	230001	LIGHT, GREEN PILOT (22MM)	
08	230002	LED, REPLACEMENT	
09	200273	BLOCK, N/C CONTACT	
10	200272	BLOCK, N/O CONTACT	
11	200512	SELECTOR, 3-POSITION	
12	200262-2	SELECTOR, 2 POSITION	
13	200411	PUSH BUTTON, W/GREEN CAP	
14	200262-3	SELECTOR, 3 POSITION	
15	100393	SELECTOR, 3 POSITION, KEY SELECT	
16	SL3-124B	PANEL, ONE HEAD CONTROL	
17	200322	SWITCH, 2-POSITION SELECTOR>>>	
18	200369	SWITCH, W/KEY LOCK (IDEC)	
19	200380	KEYPAD, CONTROL W/ DISPLAY	
20	200271	BLOCK, AC POWER>>>	
21	200270	BULB, REPLACEMENT	
22	200229	SWITCH, MUSHROOM	
23	200431	FLANGE	
24	200125	COVER, SOCKET	
25	200124	SOCKET, 8 PIN TIMER	
26	200122	CLIP, TIMER MOUNTING	
27	200121	TIMER, DELAY	



SC-I-01



SC-I-02



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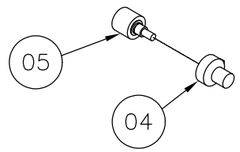
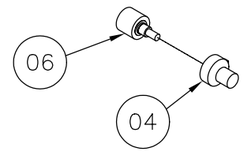


SC-I-04



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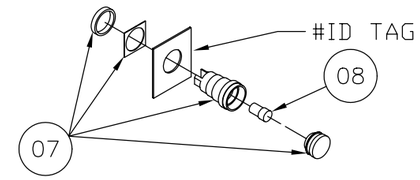
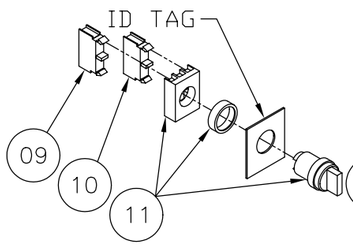
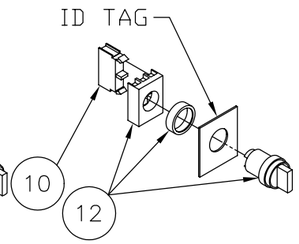


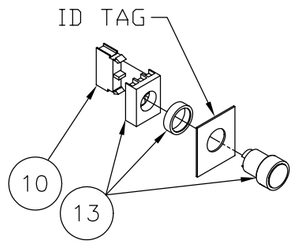
PL-I-01



SW-I-01



SW-I-02



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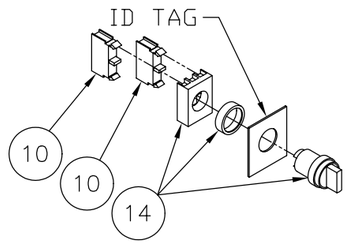
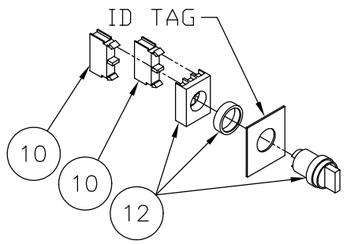
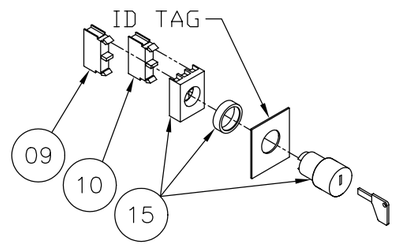


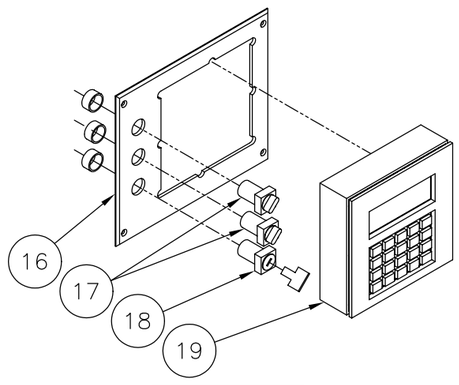
SW-I-04



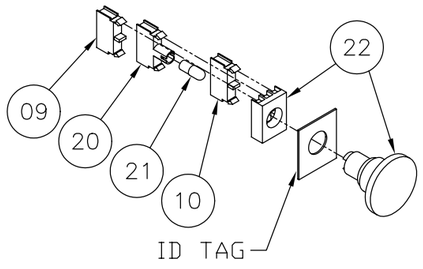
SW-I-05



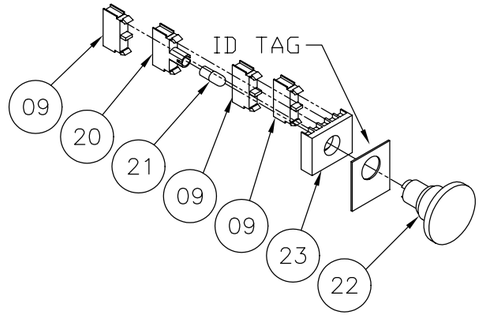
SW-I-06



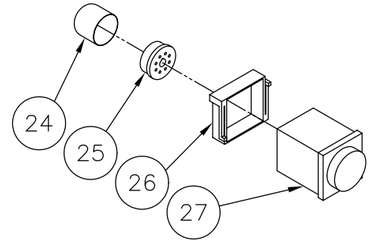
SL3C-I-01



ES-I-01



ES-I-02



TM-I-01

REV	DATE	ECO	REVISION RECORD	CHANGE BY	CHKD BY
A	04/04/03	—	PART 200192-1 WAS 200192	J.K.P.	

DESCRIPTION ASSEMBLY, SWITCHING AND TIMING

PRODUCT CONVEYOR CONTROLS

DRAWN BY P.T.M.

DATE 10-24-2002

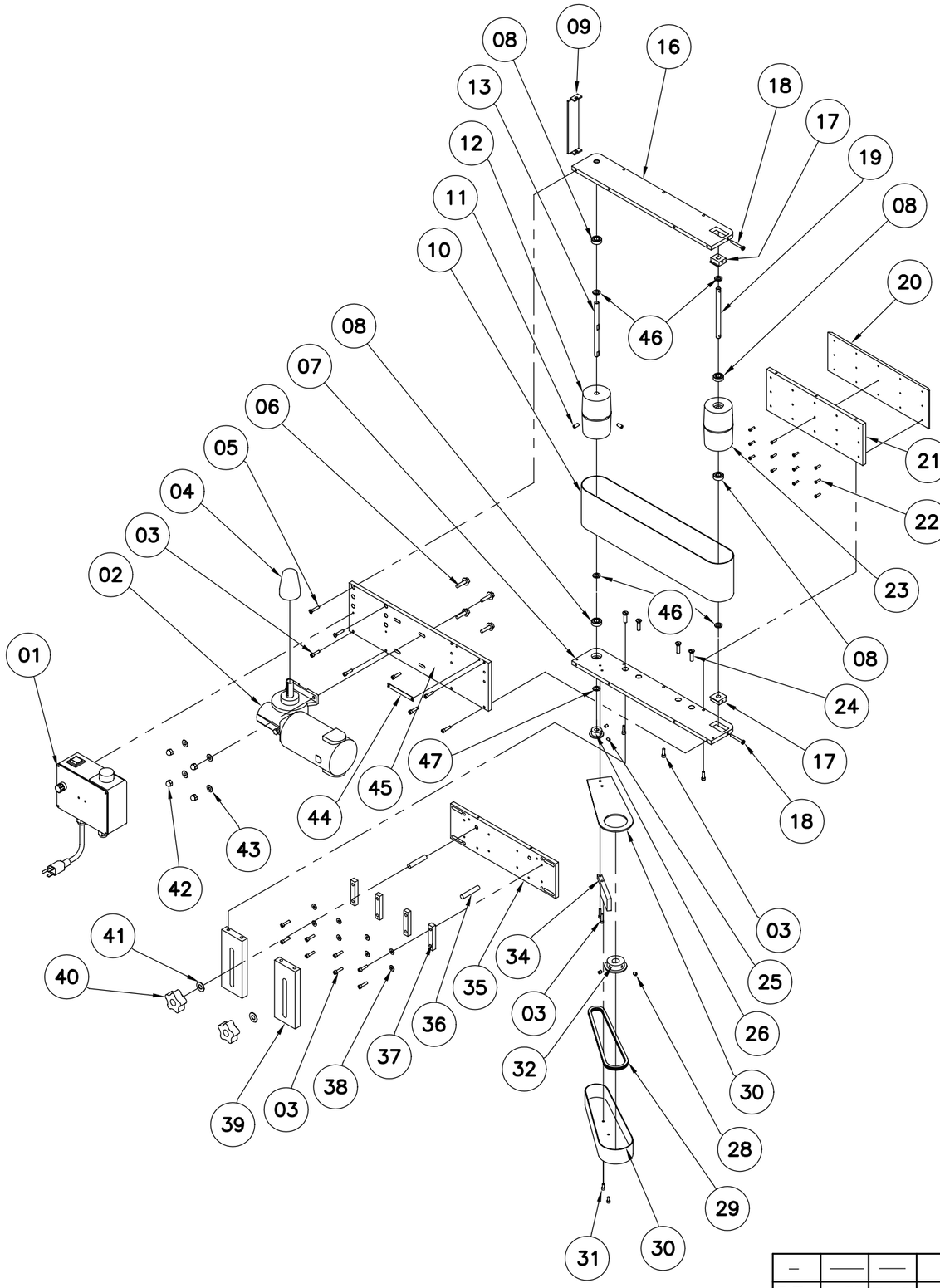
JOB NUMBER

PART NUMBER

PRINT NUMBER CW-I-00

universal™ LABELING SYSTEMS INC.

3501 8TH AVENUE SOUTH
ST. PETERSBURG, FLORIDA 33711
TEL. (727) 327-2123



ITEM	PART	DESCRIPTION	QTY
01*	TB1-I-00A	ASSEMBLY, CONTROL BOX	1
2	300020-1	MOTOR, 1/4HP/125 RPM (BODINE)	1
2J	300012-2	MOTOR, 1/4HP/62 RPM (BODINE)	1
2K	300012-1	MOTOR, 1/4HP/300 RPM (BODINE)	1
3	850022	SCREW, 10-32 X 3/4" SHCS	19
4	TA-239	COVER, MOTOR SHAFT	1
5	852030	SCREW, 10-32 X 3/4" FHMS	2
6	851005	SCREW, 1/4-20 X 1" HHMS	4
7ABCD	TA-234	PLATE, 15" LOWER MOUNTING	1
7EFGH	T24-234	PLATE, 24" LOWER MOUNTING	1
8	400016	BEARING, 3/8" SEALED	4
9I	TA-249-1.000	COVER, 1" SAFETY	1
9AE	TA-249-2.000	COVER, 2" SAFETY	1
9BF	TA-249-3.000	COVER, 3"SAFETY	1
9CG	TA-249-4.000	COVER, 4"SAFETY	1
9DH	TA-249-6.000	COVER, 6"SAFETY	1
10I	600002-37.50	BELT, 1" X 37.50" WHITE SLICK	1
10I	600002-37.50BR	BELT, 1" X 37.50" BLACK RUBBER	1
10A	600007	BELT, 2" X 37.50" WHITE SLICK	1
10A	600229	BELT, 2" X 37.50" BLACK RUBBER	1
10B	600337	BELT, 3" X 37.50" BLACK RUBBER	1
10B	600011	BELT, 3" X 37.50" WHITE SLICK	1
10F	600098	BELT, 3" X 55.25" WHITE SLICK	1
10C	600008	BELT, 4" X 37.50" WHITE SLICK	1
10C	600230	BELT, 4" X 37.50" BLACK RUBBER	1
10D	600142	BELT, 6" X 37.50" WHITE SLICK	1
10D	600257	BELT, 6" X 37.50" BLACK RUBBER	
10H	600229-6	BELT, 6" X 55.25" BLACK RUBBER	1
11	857010	SET SCREW, 1/4-20 X 1/2" SS	2
12I	TA-104-B	ROLLER, 1" DRIVE	1
12AE	TA-2-204-B	ROLLER, 2" DRIVE	1
12BF	TA-3-309B	ROLLER, 3" DRIVE	1
12CG	TA-4-409B	ROLLER, 4" DRIVE	1
12DH	TA6-605	ROLLER, 6" DRIVE	1
13AE	TA-237-2.000A	SHAFT, 2" DRIVE	1
13I	TA-237-1.000A	SHAFT, 1" DRIVE	1
13BF	TA-237-3.000A	SHAFT, 3" DRIVE	1
13CG	TA-237-4.000A	SHAFT, 4" DRIVE	1
13DH	TA-237-6.000A	SHAFT, 6" DRIVE	1
16ABCD	TA-232	PLATE, 15" UPPER MOUNTING	1
16EFGH	T24-232	PLATE, 24" UPPER MOUNTING	1
17	TA-233	BLOCK, IDLER SHAFT MOUNTING	2
18	852537	SCREW, 10-32 X 1-3/4" PHMS	2
19I	TA-237-1.000B	SHAFT, 1" IDLER	1
19AE	TA-237-2.000B	SHAFT, 2" IDLER	1
19BF	TA-237-3.000B	SHAFT, 3" IDLER	1
19CG	TA-237-4.000B	SHAFT, 4" IDLER	1
19DH	TA-237-6.000B	SHAFT, 6" IDLER	1
20I	TA-240-1.000	STRIP, 1"X15" WEAR	1
20A	TA-240-2.000	STRIP, 2"X15" WEAR	1
20B	TA-240-3.000	STRIP, 3"X15" WEAR	1
20C	TA-240-4.000	STRIP, 4"X15" WEAR	1
20D	TA-240-6.000	STRIP, 6"X15" WEAR	1
20F	T24-240-3.000	STRIP, 3"X24" WEAR	1
20H	T24-240-6.000	STRIP, 6"X24" WEAR	1
21I	TA-236-1.000	PLATE, 1"X15" WEAR STRIP BACKING	1
21A	TA-236-2.000	PLATE, 2"X15" WEAR STRIP BACKING	1
21B	TA-236-3.000	PLATE, 3"X15" WEAR STRIP BACKING	1
21C	TA-236-4.000	PLATE, 4"X15" WEAR STRIP BACKING	1
21D	TA-236-6.000	PLATE, 6"X15" WEAR STRIP BACKING	1
21E	T24-236-2.000	PLATE, 2"X24" WEAR STRIP BACKING	1
21F	T24-236-3.000	PLATE, 3"X24" WEAR STRIP BACKING	1
21H	T24-236-6.000	PLATE, 6"X24" WEAR STRIP BACKING	1
22	852506	SCREW, 6-32 X 1/2" PHMS	12
23I	TA-104-A	ROLLER, 1" IDLER	1
23AE	TA-2-204-A	ROLLER, 2" IDLER	1
23BF	TA-3-309A	ROLLER, 3" IDLER	1
23CG	TA-4-409A	ROLLER, 4" IDLER	1
23DH	TA6-604	ROLLER, 6" IDLER	1

ITEM	PART	DESCRIPTION	QTY
24	852008	SCREW, 1/4-20 X 3/4" FHMS	4
25	857512	SET SCREW, 10-32 X 1/4 ALLOY	2
26	TA-4-412	SPROCKET, DRIVE	1
28	857009	SET SCREW, 1/4-20 X 1/4" SS	2
29	410000-19.750	ASSY. CHAIN,#25 LINK X 19-3/4"	1
30	TA-4-406-1	COVER, TA CHAIN GUARD	1
31	850030	SCREW, 8-32 X 3/8" SHCS	1
32	400024-G	SPROCKET, 25B24"	1
34	TA-4-407	BRACKET, CHAIN GUARD	1
35ABCD	TA-2-215A1	PLATE, 15" MOUNTING	1
35EFGH	T24-215-A1	PLATE, 24" MOUNTING	1
36	TA-231	SCREW, LOCK DOWN	2
37	TA-2-215B	GUIDE, BACK PLATE	4
38	853004	WASHER, #10 FW SS	8
39	TA-2-203-A	POST, MOUNTING	2
40	SS-112	KNOB, MICROMETER ADJUST	2
41	853005	WASHER, 3/8" FW SS	2
42	854012	NUT, 1/4-20 ACORN	4
43	853003	WASHER, 1/4" .050 THK 5/8 ODFW	4
44	UNIV-02	PLATE, UNIVERSAL SERIAL NUMBER	1
45ABC	TA-235	PLATE, MOTOR BASE	1
45D	TA-635	PLATE, MOTOR BASE	1
45EFG	T24-235	PLATE, 24" MOTOR BASE	1
45H	T24-635	PLATE, 24" MOTOR BASE	1
45I	TA-135	PLATE, MOTOR BASE	1
46	L-172-12	WASHER, UHMW 093 X 380 X 625	4
47	L-172-03	WASHER, UHMW 093 X 380 X 625	1

NOTE:

A-2"X15" TURNING UNIT
B-3"X15" TURNING UNIT
C-4"X15" TURNING UNIT
D-6"X15" TURNING UNIT
E-2"X24" TURNING UNIT
F-3"X24" TURNING UNIT
G-4"X24" TURNING UNIT
H-6"X24" TURNING UNIT
I-1"X15" TURNING UNIT
J-LOW SPEED
K-HIGH SPEED
*- SEE SEPERATE DRAWING

REV	DATE	ECO	REVISION RECORD	CHANGE BY	CHKD BY
-					

DESCRIPTION: ASM, TURNING UNIT
PRODUCT: TURNING UNIT 1"-2"-3"-4"-6"
DRAWN BY: J.K.P.
DATE: 02-27-2002
JOB NUMBER:
PART NUMBER:
PRINT NUMBER: TA-I-00B

UNIVERSAL

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Bill of Material

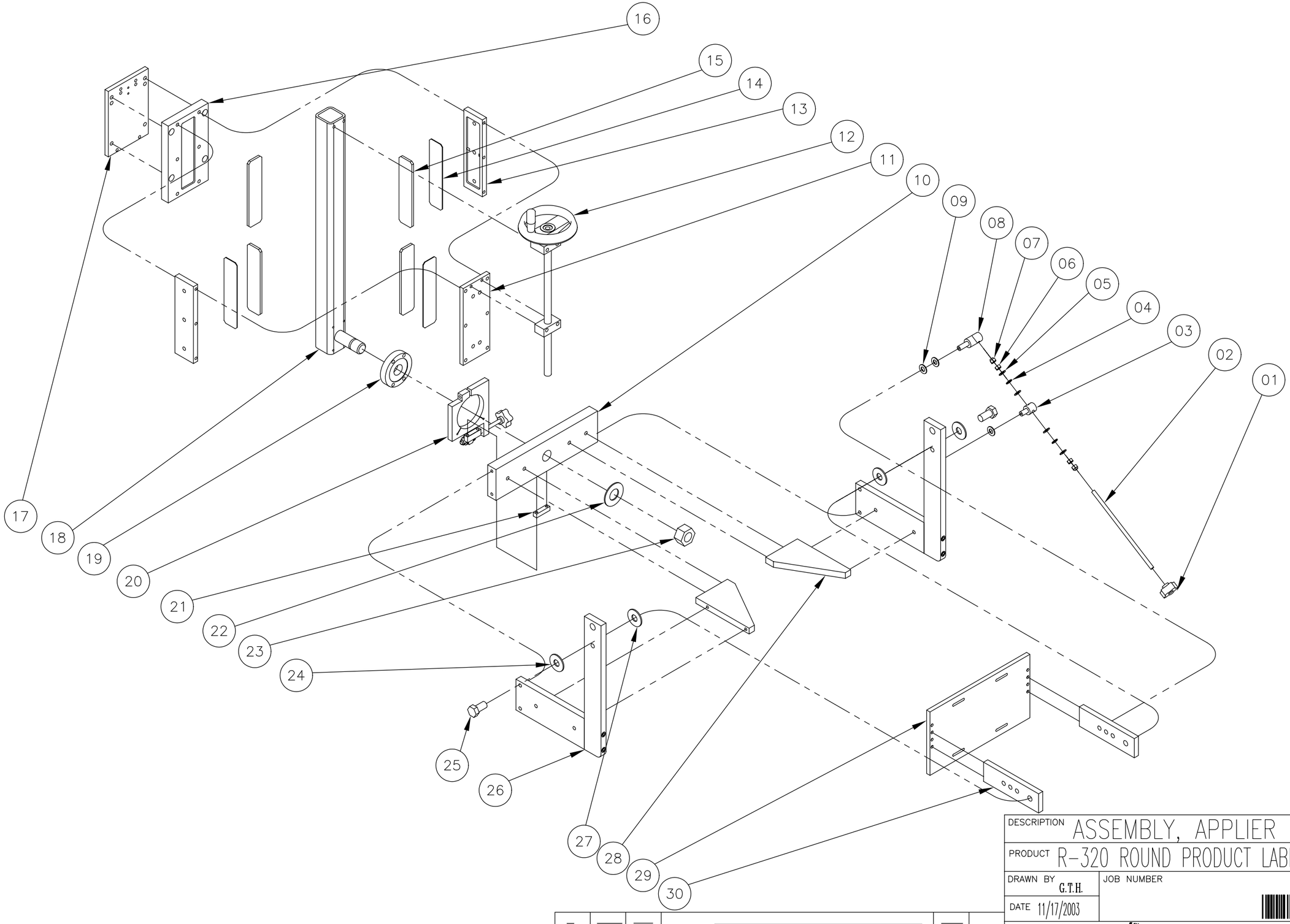
R320-I-30

APPLIER MOUNTING ASSEMBLY

MACHINE: R320

ITEM NUM:	PART NUMBER:	PART DESCRIPTION:	QTY:
01	SS-112	KNOB, MICROMETER ADJUST>>>	1
02	MA-110	SCREW, CROSS ADJUST	1
03	SS-208A	ADJUSTER, MICRON	1
04	400009	BEARING, 3/8" THRUST	2
05	400010	RETAINER, 3/8" HARDENED BRNG.	4
06	854030	NUT, HALF 3/8-16 JNSS	2
07	854004	NUT, 3/8-16 HEX SS	2
08	SS-208	STUD, PIVOTING	1
09	SS-121	SPACER, HEIGHT ADJUSTMENT	3
10	CPSS-004	BAR, MOUNT	1
11	S84-005	PLATE, BACK SLIDE	1
12*	CPSS-I-40	ASSEMBLY, CRANK	1
13	S84-010B	PLATE, SIDE SUPPORT	2
14	S84-009-2	PLATE, SUPPORT>>>	3
15	S84-009	PLATE, UHMW SLIDE	4
16	CPSS-006A	PLATE, SLIDE MOUNT	1
17	CPSS-034	BLOCK, SLEEVE MOUNT	1
18	CPSS-008	ASS'Y, VERTICAL ADJUST	1
19	CPSS-023	DISC, ANGULAR ADJUSTMENT	1
20*	MA3-I-00	ASS'Y, MA-300 MICRO ADJUST	1
21	CPSS-013	SPACER, MA 300	1
22	840025	WASHER, FLAT, 1-1/4" SS	1
23	840020	NUT, 1-1/4 - 7 SS	1
24	400099	WASHER,1/8 X 3/4 X 1-7/8" SS	2
25	400100	SCREW, 3/4-10 X 1-1/2" HHMS	2
26	CPSS-003A	ARM, MOUNTING	2
27	UPA-305	SPACER, YOKE PLASTIC	2
28	CPSS-005	GUSSET, SUPPORT	2
29	CPSS-024	PLATE, SL-2000 MOUNTING	1
30	CPSS-025	BAR,PIVOT	2

NOTE:
*** SEE DRAWING**



–	——	——	——	——	
REV	DATE	ECO	REVISION RECORD	CHANGE BY	CHKD BY

DESCRIPTION ASSEMBLY, APPLIER MOUNTING

PRODUCT R-320 ROUND PRODUCT LABELING SYSTEM

DRAWN BY G.T.H.

DATE 11/17/2003

JOB NUMBER

PART NUMBER

PRINT NUMBER R320-1-30

universal™ LABELING SYSTEMS INC.
3501 8TH AVENUE SOUTH
ST. PETERSBURG, FLORIDA 33711
TEL. (727) 327-2123

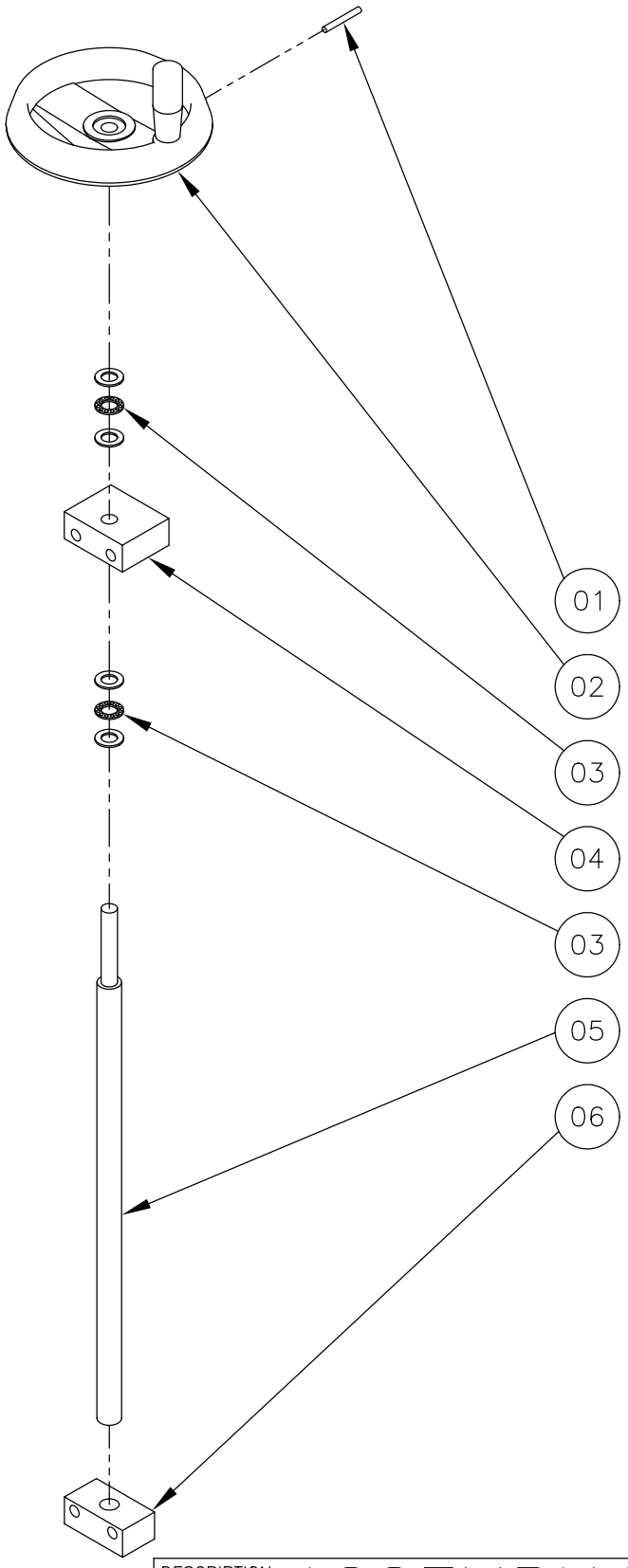
Bill of Material

CPSS-I-40

CRANK ASSEMBLY

MACHINE: R320

ITEM NUM:	PART NUMBER:	PART DESCRIPTION:	QTY:
01	810070	PIN, 3/16 X 1-1/2 ROLL	1
02	750120B	WHEEL, 6" ADJUSTING	1
03	400012	BEARING, 1/2" THRUST	2
04	S84-008-1	BLOCK, TOP CRANK SUPPORT	1
05	CPSS-022	ROD, 3/4" X 27" ACME ADJUSTER	1
06	S84-007-1	BLOCK, ADJUSTING	1



DESCRIPTION	ASSEMBLY, CRANK
PRODUCT	CP-1000/2000 OVER HEAD HOLD DOWN
DRAWN BY	K.L.D.
DATE	02-22-2001
JOB NUMBER	
PART NUMBER	

PART NUMBER CPSS-1-40

universal™ LABELING SYSTEMS INC.

3501 8TH AVENUE SOUTH
ST. PETERSBURG, FLORIDA 33711
TEL. (727) 327-2123

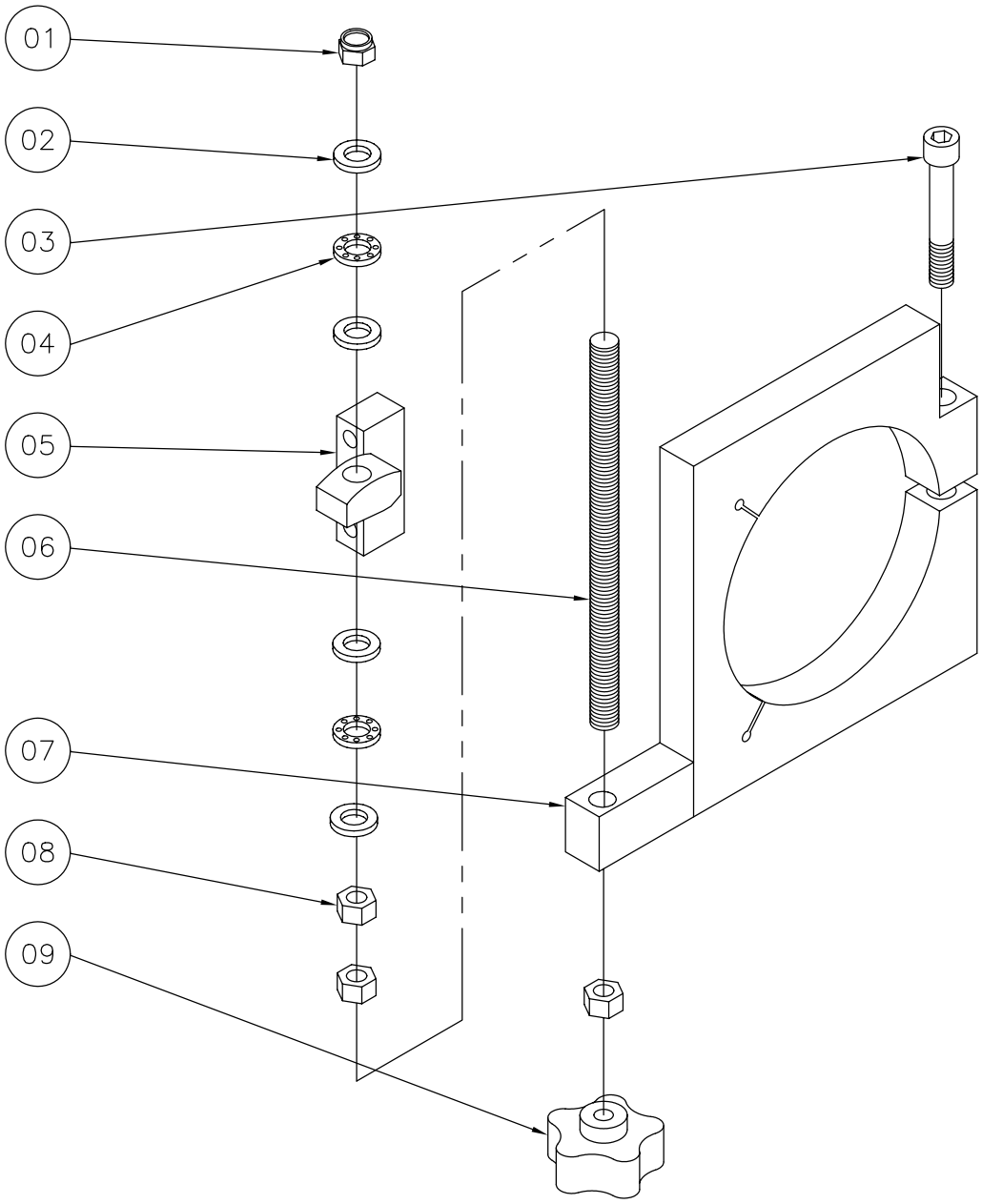
Bill of Material

MA3-I-00

MA-300 Z-AXIS ADJUST ASSEMBLY

MACHINE: R320

ITEM NUM:	PART NUMBER:	PART DESCRIPTION:	QTY:
01	854003	NUT, 3/8-16 SELF-LOCKING NYLON	1
01	400009	BEARING, 3/8" THRUST	2
03	850058	SCREW, 5/16-18 X 2" L SHCS	1
04	400010	RETAINER, 3/8" HARDENED BRNG.	4
05	SS-110	BLOCK, MICROMETER ADJ.	1
06	SS-111	BOLT, MICROMETER ADJ.	1
06	SS-109	PLATE,MICROMETER ADJ.	1
08	800400	OBS. USE 854030	3
09	SS-112	KNOB, MICROMETER ADJUST>>>	1



DESCRIPTION ASSEMBLY, MA-300 Z-AXIS ADJUST		
PRODUCT APPLIER MOUNTING ASSEMBLY		
DRAWN BY J.T.L.	JOB NUMBER	PART NUMBER
DATE 02/10/2000		

universal™ LABELING SYSTEMS INC.
3501 8TH AVENUE SOUTH
ST. PETERSBURG, FLORIDA 33711
TEL. (727) 327-2123

PART NUMBER MA3-1-00

Bill of Material

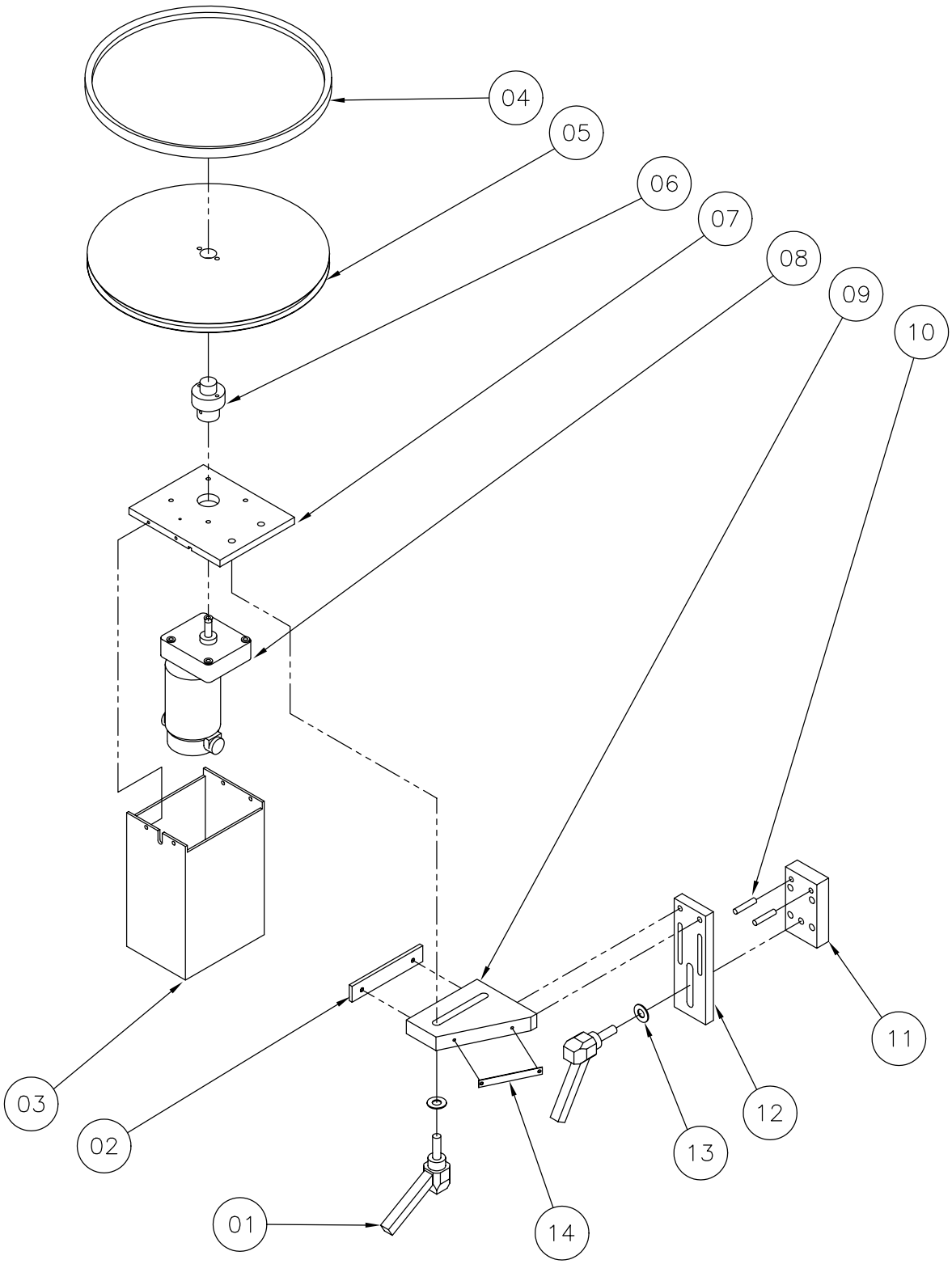
PS3-I-01

PRODUCT SPACER ASSEMBLY

MACHINE: R320

ITEM NUM:	PART NUMBER:	PART DESCRIPTION:	QTY:
01	500085A	HANDLE, 3/8 MALE RATCHET	2
02	PS-3040	GUIDE, SLIDE	1
03	PS-3007	COVER, PRODUCT SPACER	1
04*	PS-3039	BELT, SPACER 1/2"	1
04**	PS-3039A	BELT, SPACER 1-1/8"	1
05*	PS-3038	WHEEL, PRODUCT SPACER 1/2"	1
05**	PS-3038A	WHEEL, PRODUCT SPACER 1-1/2"	1
06	PS-3037	HUB, WHEEL	1
07	PS-3036	PLATE, BASE	1
08	300138	MOTOR, 1/30HP 11 RPM	1
08***	300139	MOTOR, 1/30HP 50 RPM	1
09	PS-3035	BAR, MAIN SLIDE	1
10	PS-3019	PIN, DOWEL:1/4 X 1-1/4"L	2
11	PS-3003	BLOCK, SPACER	1
12	PS-3034	POST, MOUNT	1
13	853005	WASHER, 3/8" FW SS	2
14	UNIV-02	PLATE, UNIVERSAL SERIAL NUMBER	1

NOTE:
*** 1/2" WIDE**
**** 1" WIDE**
***** HIGH SPEED**



REV	DATE	ECO	REVISION RECORD	CHANGE BY	CHKD BY
A	2/23/04	—	CHANGED 300030 TO 300138 & 300025 TO 300139	P.M.H.	

DESCRIPTION	ASSEMBLY, PRODUCT SPACER	PART NUMBER PS3-1-01
PRODUCT	CONVEYOR SYSTEMS	
DRAWN BY M.E.M.	JOB NUMBER	PART NUMBER
DATE 09/09/2003		

universal™ LABELING SYSTEMS INC.
3501 8TH AVENUE SOUTH
ST. PETERSBURG, FLORIDA 33711
TEL. (727) 327-2123

Bill of Material

R320-I-10C

CONVEYOR ASSEMBLY

MACHINE: R320

ITEM NUM:	PART NUMBER:	PART DESCRIPTION:	QTY:
01**	CA-012	SHAFT, 7" EXTENTION	4
01***	CA-012	SHAFT, 7" EXTENTION	5
01****	CA-012	SHAFT, 7" EXTENTION	5
02**	500035	PLATE, BACKING	4
02***	500035	PLATE, BACKING	5
02****	500035	PLATE, BACKING	5
03**	500030	CLIP, PLASTIC COMPRESSION	12
03***	500030	CLIP, PLASTIC COMPRESSION	13
03****	500030	CLIP, PLASTIC COMPRESSION	13
04**	R-320-012-06	RAIL, (6 FOOT CONVEYOR) GUIDE	2
04***	R-320-012-08	RAIL, (8 FOOT CONVEYOR) GUIDE	2
04****	R-320-012-10	RAIL, (10 FOOT CONVEYOR) GUIDE	2
05	CA-001D-LH	COVER, LEFT HAND DRIVE MOTOR	1
05*	CA-001D-RH	COVER, RIGHT HAND DRIVE MOTOR	1
06	600154	BELT, TIMING 1/2 P. X 33.00 L	1
07	400175-E	PULLEY, 1/2"P x 20T TIMING	1
08	400175-F	PULLEY, 1/2"P x 20T TIMING	1
09	100620	BEARING, 2-BOLT FLANGE	4
10	CAC-06-000-001B	SHAFT, DRIVE	1
11	906005-1.750	KEY, SPOCKET DRIVE	4
12**	500099	CHAIN, HP7700 SERIES MAT TOP	2 BOX
12***	500099	CHAIN, HP7700 SERIES MAT TOP	3 BOX
12****	500099	CHAIN, HP7700 SERIES MAT TOP	3 BOX
13	CA-06-000-002	BAR, 6" UPPER TIE	3
14**	CA-021A-0.782	SPACER, STANDOFF	4
14***	CA-021A-0.782	SPACER, STANDOFF	6
14****	CA-021A-0.782	SPACER, STANDOFF	6
15**	CA-020A	GUIDE, RAIL STANDOFF	4
15***	CA-020A	GUIDE, RAIL STANDOFF	6
15****	CA-020A	GUIDE, RAIL STANDOFF	6
16	R-320-013	RAIL, GUIDE	1
17**	R-320-014-06	RAIL, (6 FOOT CONVEYOR) GUIDE	1
17***	R-320-014-08	RAIL, (8 FOOT CONVEYOR) GUIDE	1
17****	R-320-014-10	RAIL, (10 FOOT CONVEYOR) GUIDE	1
18**	R-320-008	STANDOFF, GUIDE RAIL	2
19**	R-320-010	SPACER, GUIDE RAIL	2
20**	CA-021A-1.281	SPACER, STANDOFF	2
21	500092	SPROCKET, 18T	4
22	CP2-009	BAR, UPPER TIE	1
23	CAC-06-000-002	SHAFT, IDLER	1
24**	600391-72.000	FELT, 6 FT. WOOL GRADED (F-3 GRAY)	1
24***	600391-96.000	FELT, 8 FT. WOOL GRADED (F-3 GRAY)	1
24****	600391-120.000	FELT, 10 FT.WOOL GRADED (F-3 GRAY)	1
25**	500020-72.000	RAIL, 1" GUIDE (TEE) 6'L	1
25***	500020	RAIL, 1" GUIDE (TEE) 8'L	1
25****	500021	RAIL, 1" GUIDE (TEE) 10'L	1

Bill of Material

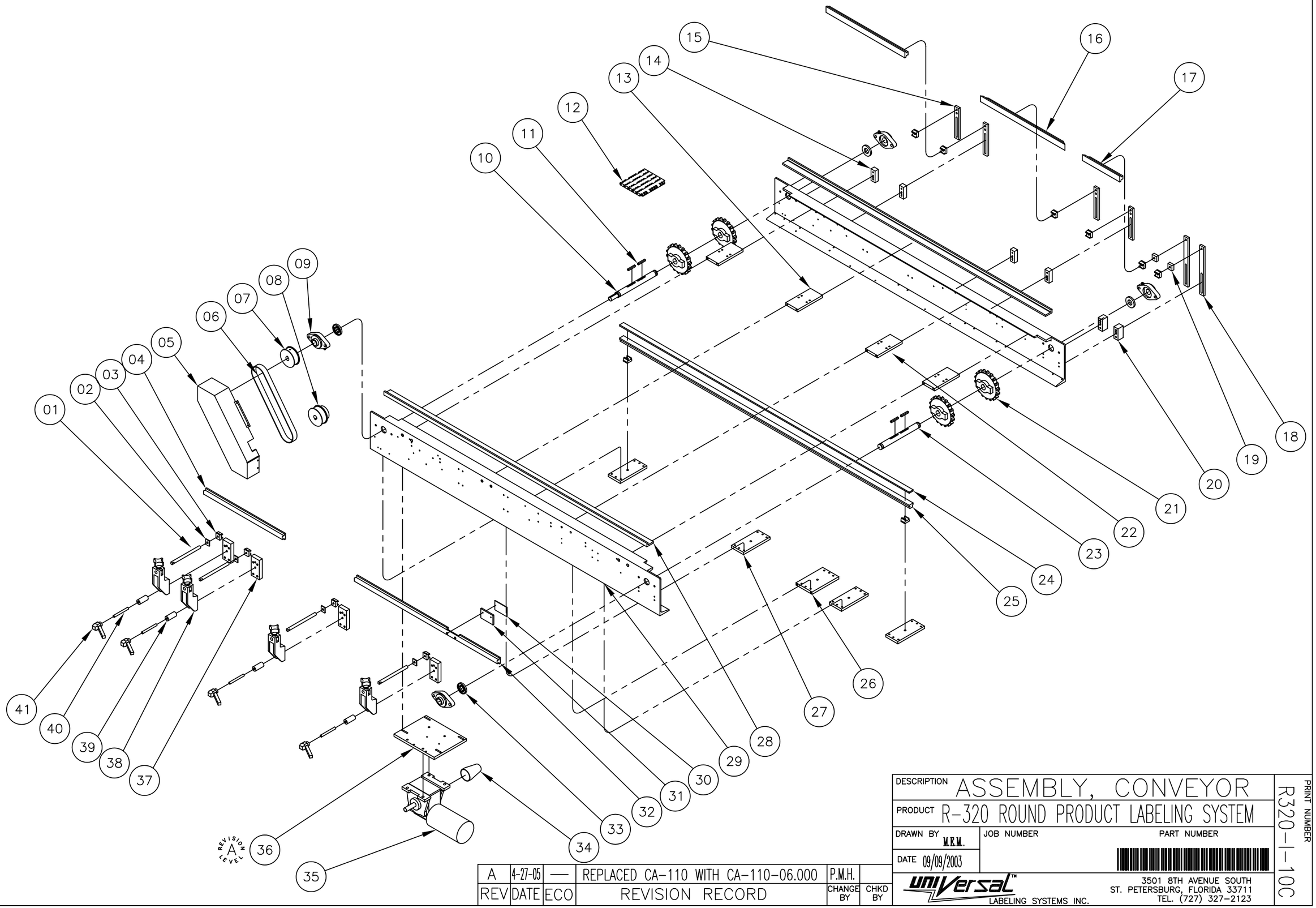
R320-I-10C

CONVEYOR ASSEMBLY

MACHINE: R320

ITEM NUM:	PART NUMBER:	PART DESCRIPTION:	QTY:
26	CP2-008	BAR, LOWER TIE	1
27	CA-06-000-001	BAR, 6" LOWER TIE	4
28	CP-039	STRIP, MATTOP WEAR	2
29**	CAC-006A	FRAMES, 6 FT. CONVEYOR SIDE	1
29***	CAC-008A	FRAMES, 8 FT. CONVEYOR SIDE	1
29****	CAC-010A	FRAMES. 10 FT. CONVEYOR SIDE	1
30	600390A	PAD, PRODUCT SPACER BACKING	1
31	CA-031	PLATE, BACKING SPACER	1
32**	R-320-011-06	RAIL, (6 FOOT CONVEYOR) GUIDE	1
32***	R-320-011-08	RAIL, (8 FOOT CONVEYOR) GUIDE	1
32****	R-320-011-10	RAIL, (10 FOOT CONVEYOR) GUIDE	1
33	100630	BEARING, BACK SEAL	4
34	CA-005B	COVER, MOTOR SHAFT	1
35	300003-3	MOTOR,1/2HP BODINE 69RPM	1
35*****	300003-1	MOTOR, 1/2HP W/TERMINAL BOX	1
36	CA-110-06.000	PLATE, 6" WIDE CONVEYOR MOTOR MOUNT (BODINE)	1
37**	CA-038	SPACER, 3/4"	4
37***	CA-038	SPACER, 3/4"	5
37****	CA-038	SPACER, 3/4"	5
38**	500045	BRACKET,STD GUIDE RAIL	4
38***	500045	BRACKET,STD GUIDE RAIL	5
38****	500045	BRACKET,STD GUIDE RAIL	5
39**	CA-036	STANDOFF, RACHET HANDLE	4
39***	CA-036	STANDOFF, RACHET HANDLE	5
39****	CA-036	STANDOFF, RACHET HANDLE	5
40**	SS-124-2	ROD, 3/8 THREADED	4
40***	SS-124-2	ROD, 3/8 THREADED	5
40****	SS-124-2	ROD, 3/8 THREADED	5
41**	500084	HANDLE, 3/8 FEMALE RATCHET	4
41***	500084	HANDLE, 3/8 FEMALE RATCHET	5
41****	500084	HANDLE, 3/8 FEMALE RATCHET	5

*** RIGHT HAND VERSION**
**** 6 FT. LONG VERSION**
***** 8 FT. LONG VERSION**
****** 10 FT. LONG VERSION**
******* R-322 SYSTEM**



REV	DATE	ECO	REVISION RECORD	CHANGE BY	CHKD BY
A	4-27-05	—	REPLACED CA-110 WITH CA-110-06.000	P.M.H.	

DESCRIPTION ASSEMBLY, CONVEYOR

PRODUCT R-320 ROUND PRODUCT LABELING SYSTEM

DRAWN BY M.E.M.

DATE 09/09/2003

JOB NUMBER

PART NUMBER

PRINT NUMBER R320-I-10C

universal™ LABELING SYSTEMS INC.
3501 8TH AVENUE SOUTH
ST. PETERSBURG, FLORIDA 33711
TEL. (727) 327-2123

Bill of Material

R320-I-20

JUNCTION BOX ASSEMBLY

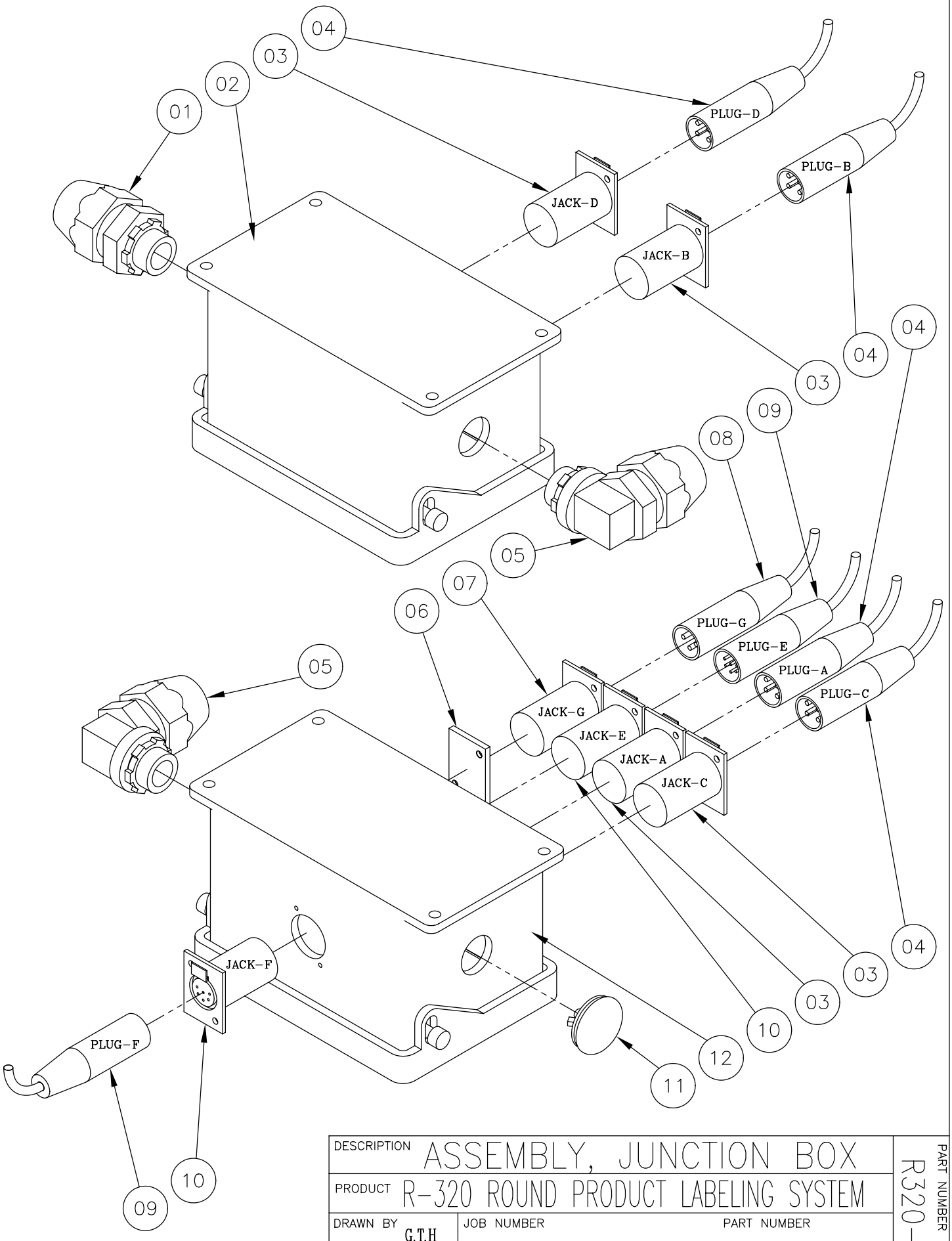
MACHINE: R320

ITEM NUM:	PART NUMBER:	PART DESCRIPTION:	QTY:
01	100192	CONNECTOR, STRAIGHT	1
02	100612-1-CCCC	BOX, JUNCTION	1
03	200280	RECEPTACLE, FEMALE 4-PIN	4
04	200279	CONNECTOR, MALE 4-PIN	4
05	100191	CONNECTOR, 90 DEGREE ELBOW	2
06*	UPA-307	COVER, RECEPTACLE	1
07**	200275	RECEPTACLE, FEMALE 3-PIN	1
08**	200274	CONNECTOR, MALE 3-PIN	1
09	200283	CONNECTOR, MALE 6-PIN	2
10	200284	RECEPTACLE, FEMALE 6-PIN	2
11	700070B	SEAL, 7/8" DIA. PAINTED HOLE	1
12	100612-1-NNN	BOX, JUNCTION	1

NOTE:

*** L-15 VERSION**

**** SL-1000 VERSION**



DESCRIPTION	ASSEMBLY, JUNCTION BOX	PART NUMBER R320–I–20
PRODUCT	R–320 ROUND PRODUCT LABELING SYSTEM	
DRAWN BY G.T.H	JOB NUMBER	PART NUMBER
DATE 09/11/2003		

universal™ LABELING SYSTEMS INC.
3501 8TH AVENUE SOUTH
ST. PETERSBURG, FLORIDA 33711
TEL. (727) 327–2123

Bill of Material

CPSS-I-10A

CONVEYOR BASE ASSEMBLY

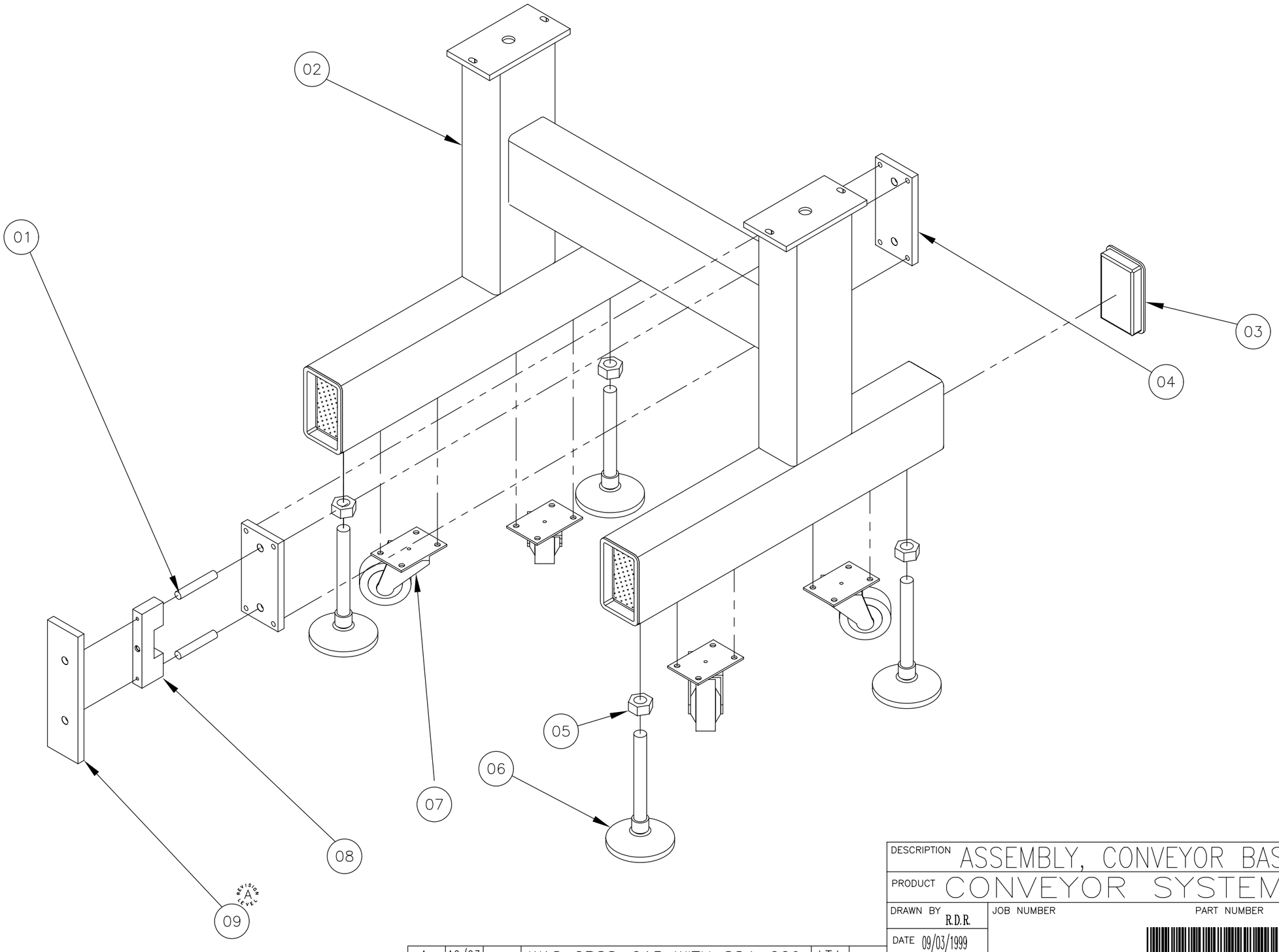
MACHINE: R320

ITEM NUM:	PART NUMBER:	PART DESCRIPTION:	QTY:
01 (A)	CPSS-026	SHAFT, SPACER	2
01 (B)	CPSS-026B	SHAFT, SPACER	2
02 (C)(32)	CPSS-027B-32	ASSEMBLY, 6'-8' CONVEYOR STAND	1
02 (C)(34)	CPSS-027B-34	ASSEMBLY, 6'-8' CONVEYOR STAND	1
02 (C)(36)	CPSS-027B-36	ASSEMBLY, 6'-8' CONVEYOR STAND	1
02 (C)(38)	CPSS-027B-38	ASSEMBLY, 6'-8' CONVEYOR STAND	1
02 (C)(40)	CPSS-027B-40	ASSEMBLY, 6'-8' CONVEYOR STAND	1
02 (C)(42)	CPSS-027B-42	ASSEMBLY, 6'-8' CONVEYOR STAND	1
02 (C)(44)	CPSS-027B-44	ASSEMBLY, 6'-8' CONVEYOR STAND	1
02 (D)(32)	CPSS-027A-32	ASSEMBLY, 10'-12' CONVEYOR STAND	1
02 (D)(34)	CPSS-027A-34	ASSEMBLY, 10'-12' CONVEYOR STAND	1
02 (D)(36)	CPSS-027A-36	ASSEMBLY, 10'-12' CONVEYOR STAND	1
02 (D)(38)	CPSS-027A-38	ASSEMBLY, 10'-12' CONVEYOR STAND	1
02 (D)(40)	CPSS-027A-40	ASSEMBLY, 10'-12' CONVEYOR STAND	1
02 (D)(42)	CPSS-027A-42	ASSEMBLY, 10'-12' CONVEYOR STAND	1
02 (D)(44)	CPSS-027A-44	ASSEMBLY, 10'-12' CONVEYOR STAND	1
03	CPSS-031	CAP, END	4
04	CPSS-011	MOUNT, SPACER	2
05	SS-108	NUT, 3/4 X 10 HEX	4
06	500072	FOOT, ARTICULATED	4
07	700260	CASTER, 3" SWIVEL W/LOCK	4
08 (A)	CPSS-010	SPACER, APPLICATOR MOUNTING	1
08 (B)	CPSS-010A	SPACER, APPLICATOR MOUNTING	1
09	CPSS-015B	BAR, STABILIZER	1

NOTE:

(A) = R320 VERSION
(B) = R322 VERSION
(C) = 6'-8' CONVEYOR VERSION
(D) = 10'-12' CONVEYOR VERSION

(32) = 32" +/-2" WORKING HEIGHT
(34) = 34" +/-2" WORKING HEIGHT
(36) = 36" +/-2" WORKING HEIGHT
(38) = 38" +/-2" WORKING HEIGHT
(40) = 40" +/-2" WORKING HEIGHT
(42) = 42" +/-2" WORKING HEIGHT
(44) = 44" +/-2" WORKING HEIGHT



REV	DATE	ECO	REVISION RECORD	CHANGE BY	CHKD BY
A	10/03	—	WAS CPSS-015 WITH S84-009	J.T.L	

DESCRIPTION ASSEMBLY, CONVEYOR BASE

PRODUCT CONVEYOR SYSTEMS

DRAWN BY R.D.R.

DATE 09/03/1999

JOB NUMBER

PART NUMBER

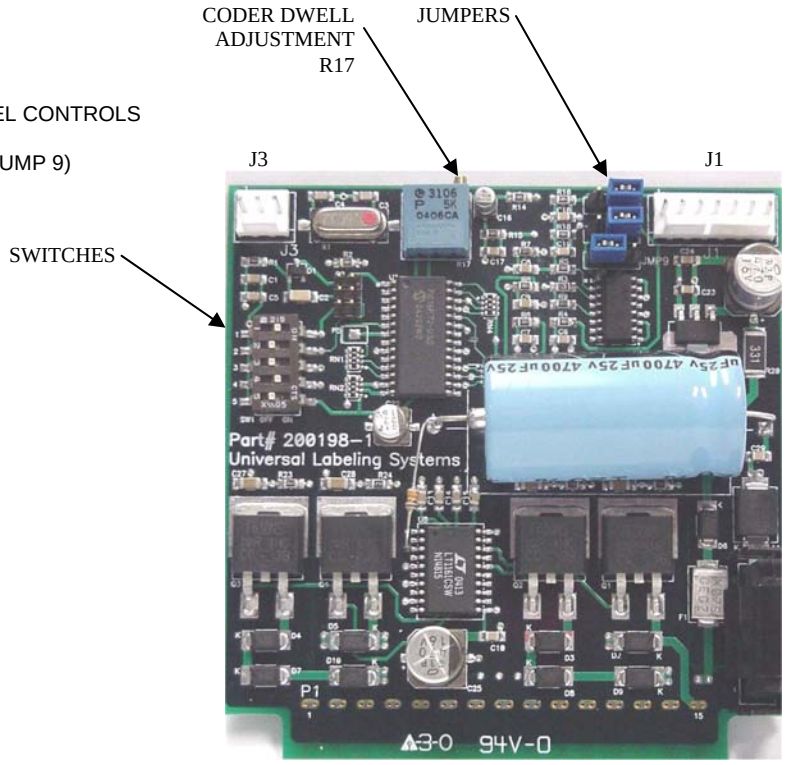
universal™ LABELING SYSTEMS INC.

3501 8TH AVENUE SOUTH
ST. PETERSBURG, FLORIDA 33711
TEL. (727) 327-2123

PRINT NUMBER CPSS-I-10A

POWER MODULE SETUP SHEET

PLEASE READ CAREFULLY BEFORE INSTALLING



SWITCH #1 DELAY SELECT
OFF - NO DELAY
ON - START AND STOP DELAY SET BY FRONT PANEL CONTROLS
START CONTROL - 0 TO 1 SEC.
STOP CONTROL - 0 TO 0.1 OR 1.0 SEC. (SEE JUMP 9)

SWITCH #2 MACHINE MODE SELECT
OFF - L15 OPERATION
ON - L60 OPERATION

SWITCH #3 CLUTCH / BRAKE DELAY SELECT
[L15] SWITCH #3, W/SWITCH #2 OFF
OFF - 0 mS
ON - 25 mS
[L60] SWITCH #3, W/SWITCH #2 ON
OFF - BLOW-ON
ON - TAMP-ON

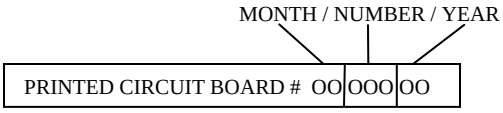
SWITCH #4 START SWITCH LOGIC LEVEL SELECT
OFF - FALLING SIGNAL EDGE ACTIVATION
ON - RISING SIGNAL EDGE ACTIVATION

SWITCH #5 STOP SWITCH LOGIC LEVEL SELECT
OFF - FALLING SIGNAL EDGE ACTIVATION
ON - RISING SIGNAL EDGE ACTIVATION

JUMPERS #6 START SWITCH TYPE SELECT
PINS 1 & 2 - SPDT START SWITCH
PINS 2 & 3 - SINGLE POLE INPUT

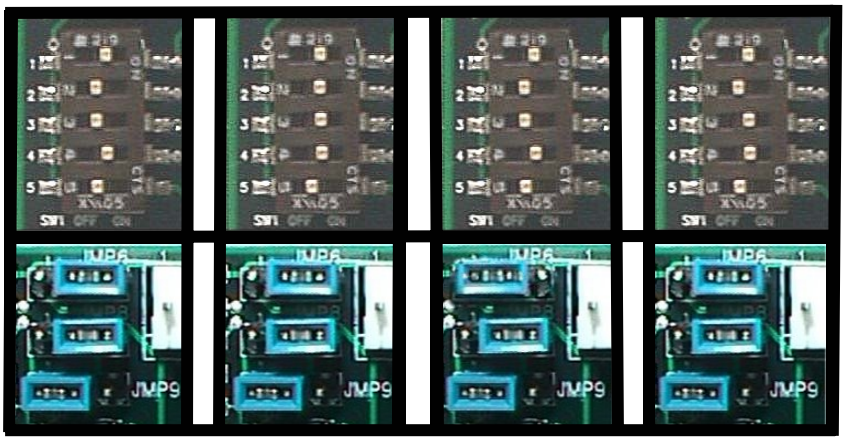
JUMPERS #8 SINGLE POLE START SWITCH POLARITY SELECT
PINS 1 & 2 - SWITCHES TO POSITIVE +5V TO +24V DC (PNP)
PINS 2 & 3 - SWITCHES TO GROUND (NPN)

JUMPERS #9 STOP DELAY SELECT
PINS 1 & 2 - LONG DELAY 0 TO 1 SEC.
PINS 2 & 3 - SHORT DELAY 0 TO 0.1 SEC.



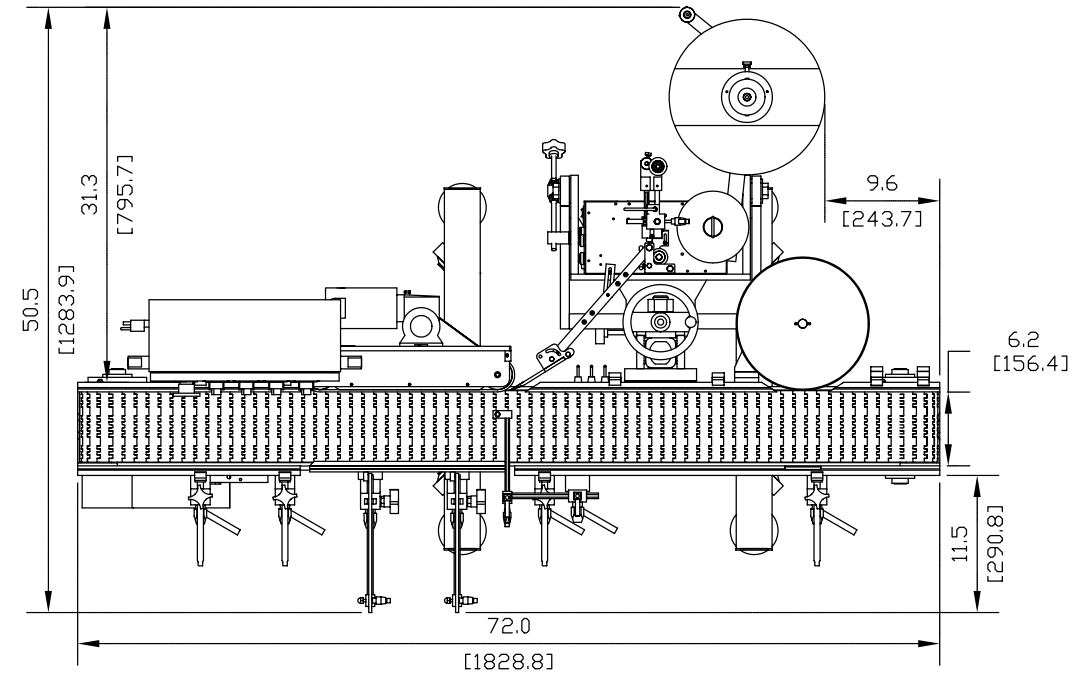
DEFAULT SETTINGS

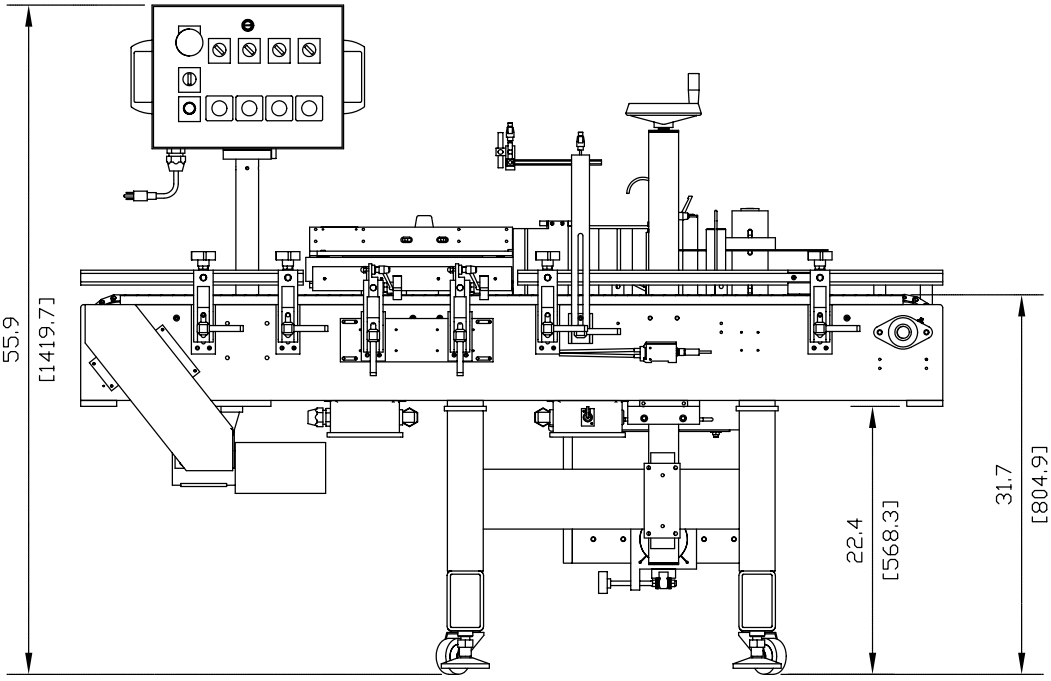
L-15 L-60 R-310 SL-1000



The Universal Power Module is designed to operate the L15, L20, L30, R310, MP25, L60, and SL1000 series of label machines. The L15, L20, L30 and MP25 are set up the same! The L60, R310 & SL-1000 are different, SEE DEFAULT SETTINGS.

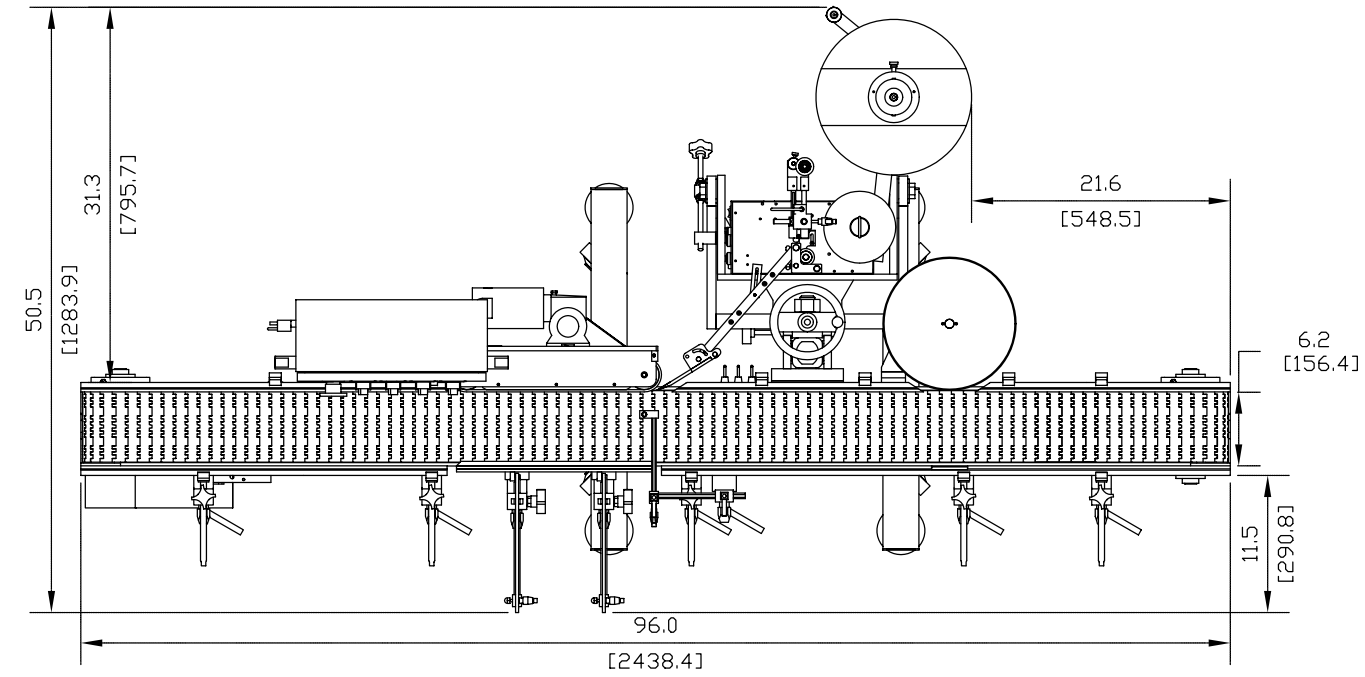
Coder output is adjusted by (R17) top left board and operates in all modes. The dwell time is adjustable from 0 to 0.5 seconds. The next start signal or product signal will be ignored until the coder pulse is turned off.
(NOTE) IF YOU HAVE L-60 WITH FRONT & REAR BOARD,
THE BOARD MUST BE SET UP AS L-15.

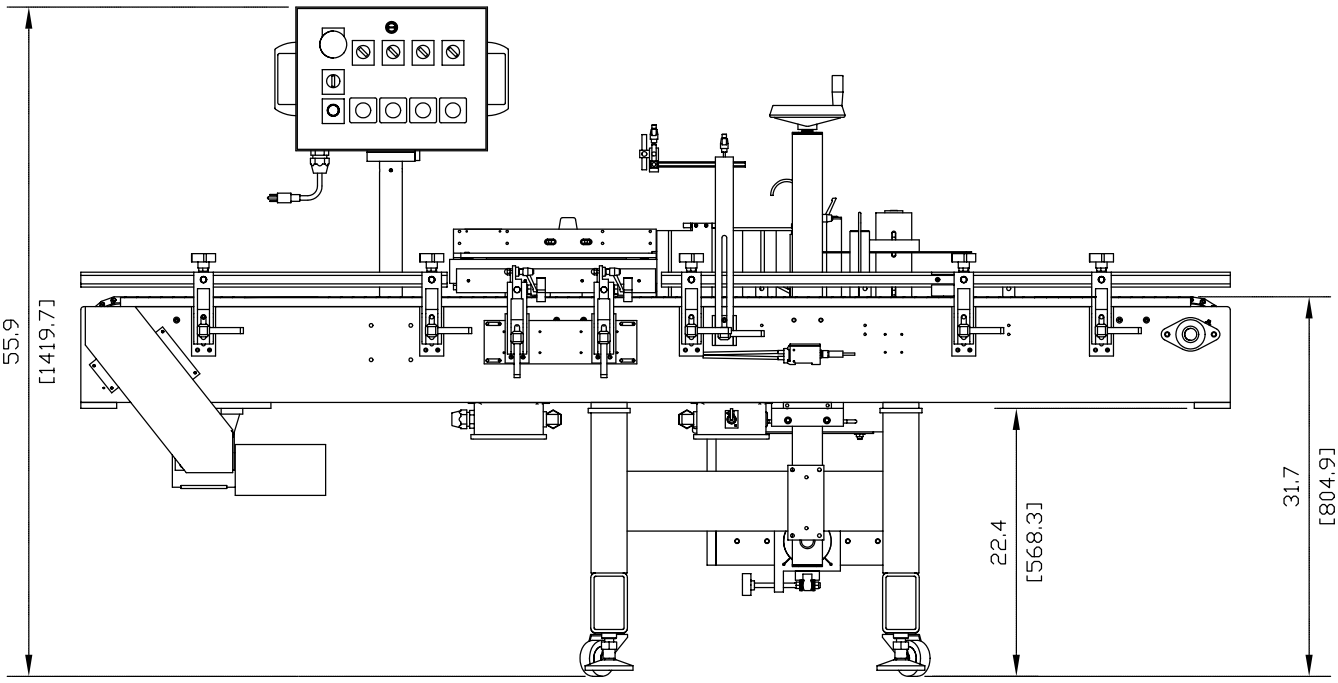




DESCRIPTION	DIMENSIONAL DRAWING	PRINT NUMBER R320L6-L15-F-00
PRODUCT	6 FOOT R-320 ROUND PRODUCT LABELING SYSTEM (L-15)	
DRAWN BY G.T.H.	JOB NUMBER / PART NUMBER	
DATE 11/18/2003		

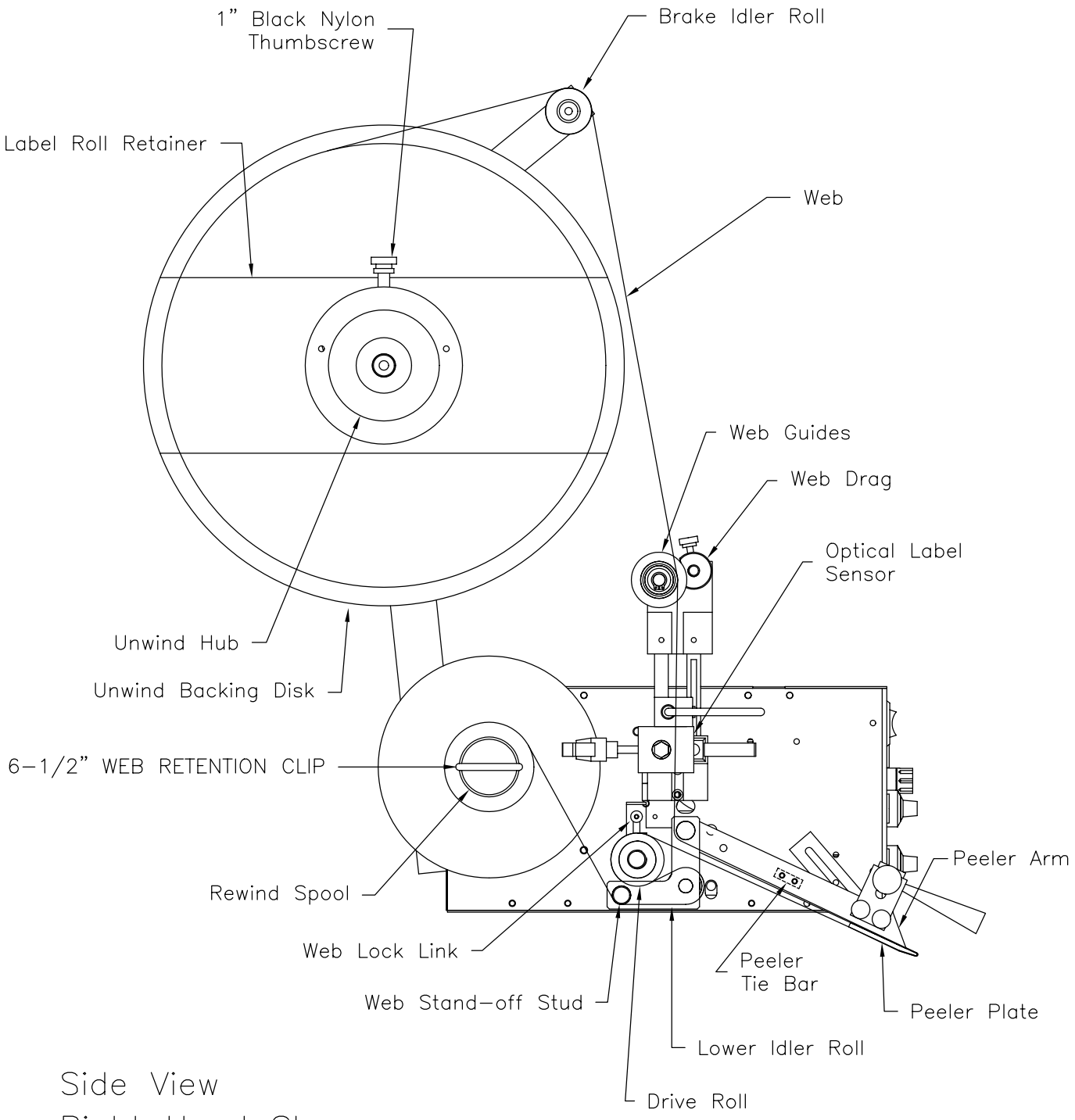
universal LABELING SYSTEMS INC.
3501 8TH AVENUE SOUTH
ST. PETERSBURG, FLORIDA 33711
TEL. (727) 327-2123





DESCRIPTION	DIMENSIONAL DRAWING	PRINT NUMBER R320L8-L15-F-00
PRODUCT	8 FOOT R-320 ROUND PRODUCT LABELING SYSTEM (L-15)	
DRAWN BY G.T.H.	JOB NUMBER / PART NUMBER	
DATE 11/18/2003		

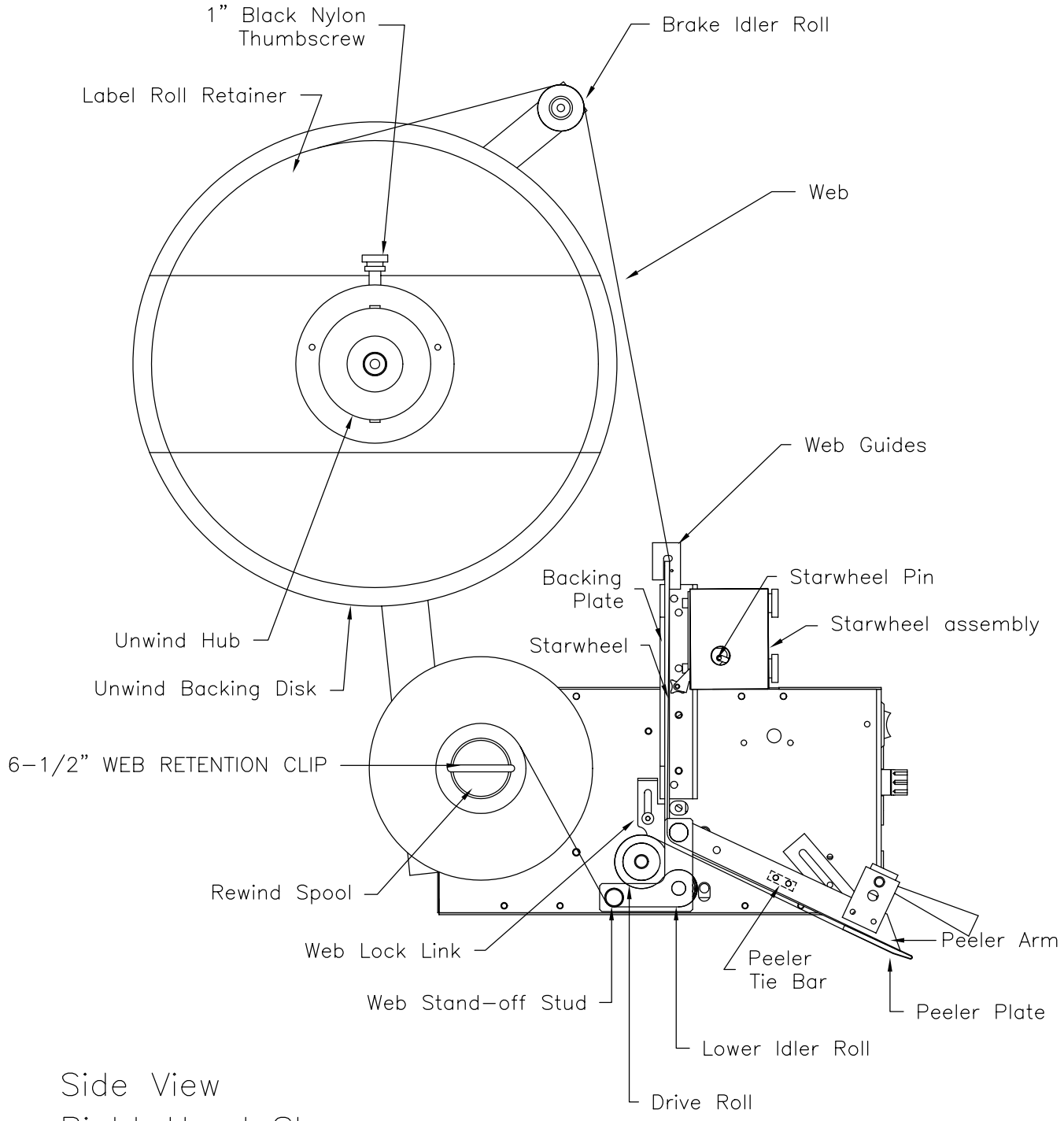
universal LABELING SYSTEMS INC.
3501 8TH AVENUE SOUTH
ST. PETERSBURG, FLORIDA 33711
TEL. (727) 327-2123



Side View
Right Hand Shown

DESCRIPTION	WEBBING DIAGRAM	PART NUMBER L15-W-00C
PRODUCT	L-15 LABEL APPLICATOR (OPTICAL)	
DRAWN BY G.T.H.	JOB NUMBER	PART NUMBER
DATE 05-01-2003		

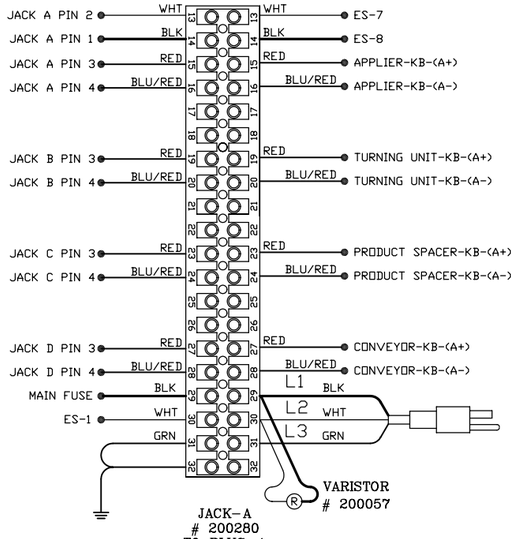
universal™ LABELING SYSTEMS INC.
3501 8TH AVENUE SOUTH
ST. PETERSBURG, FLORIDA 33711
TEL. (727) 327-2123



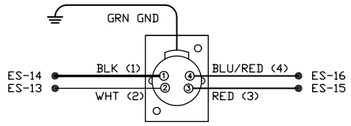
Side View
Right Hand Shown

DESCRIPTION WEBBING DIAGRAM		PART NUMBER L15-W-00
PRODUCT L-15 LABEL APPLICATOR (STARWHEEL)		
DRAWN BY G.T.H.	JOB NUMBER	PART NUMBER
DATE 6/11/1998		

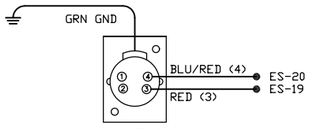
universal™ LABELING SYSTEMS INC.
3501 8TH AVENUE SOUTH
ST. PETERSBURG, FLORIDA 33711
TEL. (727) 327-2123



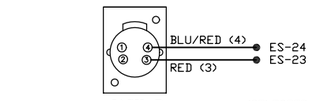
JACK-A
200280
TO PLUG-A
APPLIER POWER



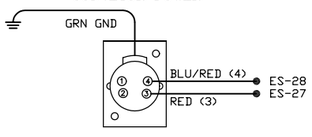
JACK-B
200280
TO PLUG-B
TURNING UNIT POWER

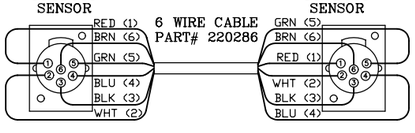


JACK-C
200280
TO PLUG-C
PRODUCT SPACER POWER

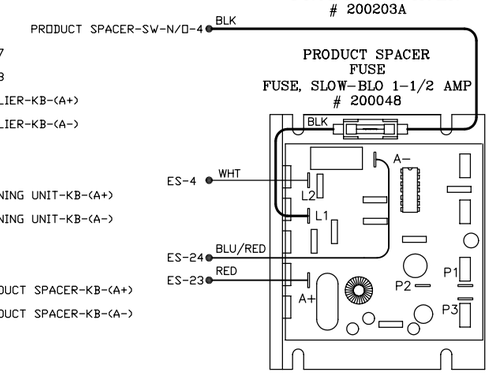


JACK-D
200280
TO PLUG-D
CONVEYOR POWER

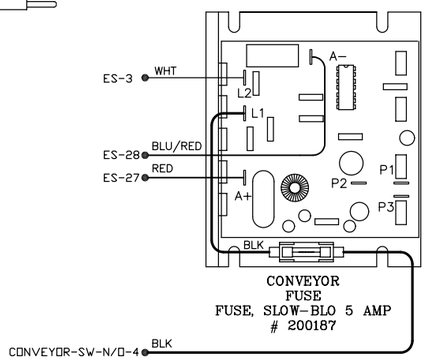




SPEED CONTROL, KB DRIVE
PRODUCT SPACER
200203A

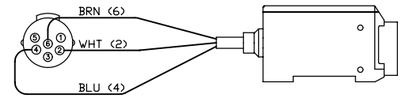


SPEED CONTROL, KB DRIVE
CONVEYOR
200203C

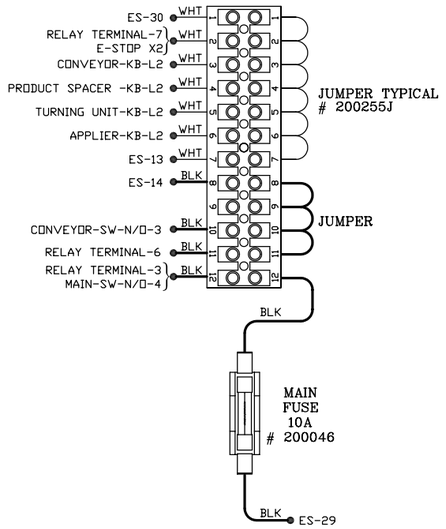


PLUG-F
#200283
TO JACK-F
L-15
PRODUCT SENSOR

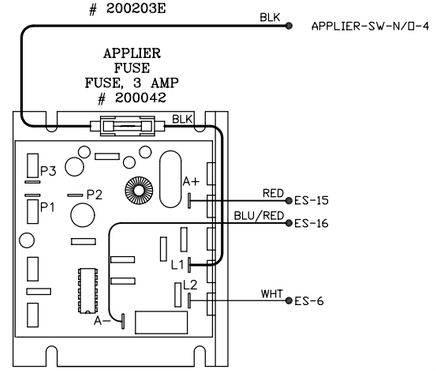
SMARTEYE EZPRO SENSOR
#210120
PRODUCT SENSOR



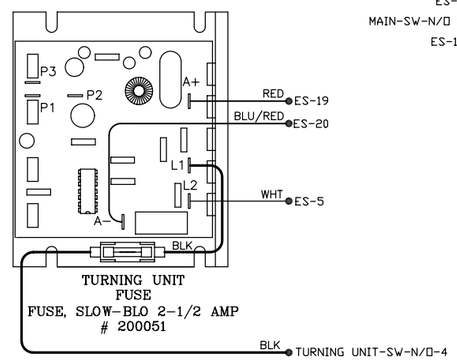
LINE



SPEED CONTROL, KB DRIVE
APPLIER
200203E

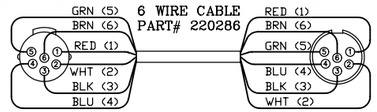


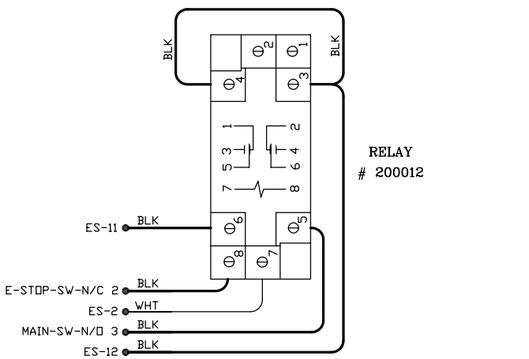
SPEED CONTROL, KB DRIVE
TURNING UNIT
200203B



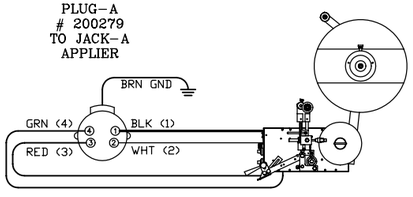
PLUG-E
#200283
TO JACK-E
L-15
PRODUCT SENSOR

PLUG
#200020
TO PRODUCT SENSOR
JACK ON
L-15

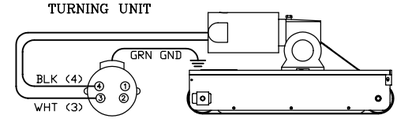




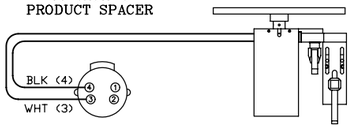
PLUG-A
200279
TO JACK-A
APPLIER



PLUG-B
200279
TO JACK-B
TURNING UNIT

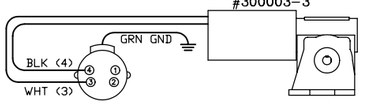


PLUG-C
200279
TO JACK-C
PRODUCT SPACER

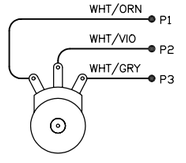


PLUG-D
200279
TO JACK-D
CONVEYOR

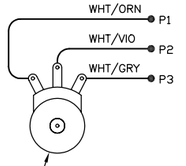
1/2 HP CONVEYOR
DRIVE MOTOR
#300003-3



CONVEYOR
SPEED CONTROL

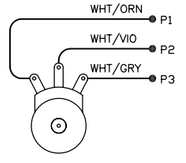


PRODUCT SPACER
SPEED CONTROL

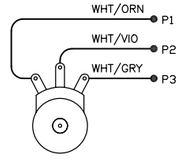


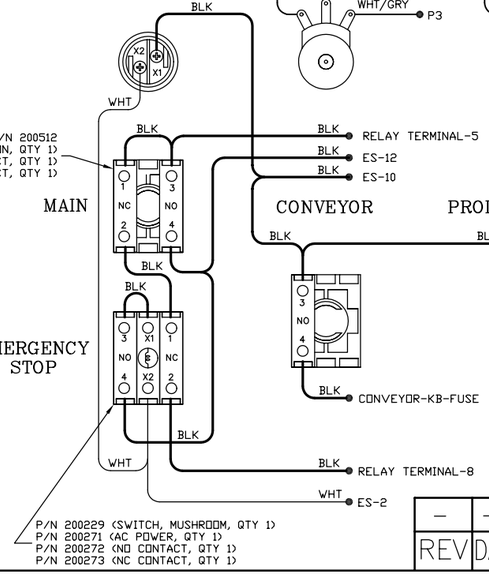
P/N 200204 (5K POTENTIOMETER, QTY 4)

TURNING UNIT
SPEED CONTROL



APPLIER
SPEED CONTROL





REV	DATE	ECO	REVISION RECORD	CHANGE BY	CHKD BY
–	——	——	——	——	

DESCRIPTION: ELECTRICAL DIAGRAM
PRODUCT: R-320 ROUND PRODUCT LABELING SYSTEM (L-15)
DRAWN BY: G.T.H.
DATE: 09/08/2003
JOB NUMBER
PART NUMBER

universal™ LABELING SYSTEMS INC.
3501 8TH AVENUE SOUTH
ST. PETERSBURG, FLORIDA 33711
TEL. (727) 327-2123

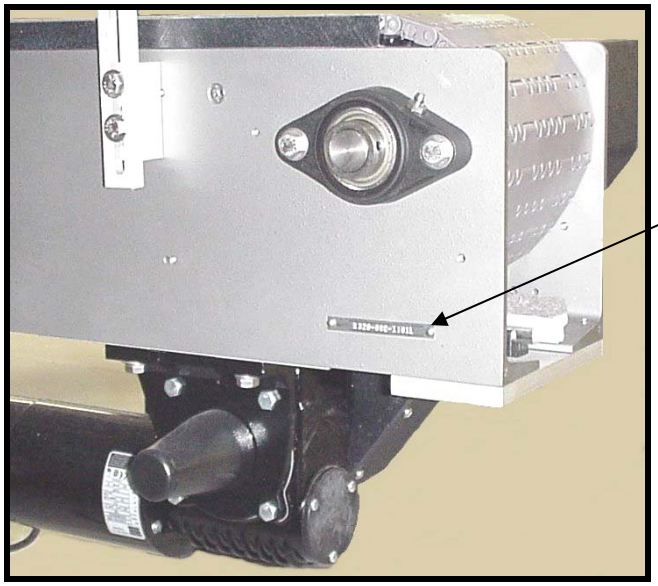
PRINT NUMBER
R320-L15-E-00

TECHNICAL SUPPORT

When calling for Technical Support:
have your Model #: R320
and
Serial Number ready:
R320 (located on the side opposite the conveyor drive motor cover).
L15 (located on the side opposite the roll of labels).

Email: fjones@universal1.com

Web Site: http://www.universal1.com



SERIAL NUMBER PLATE